cc 1442

```
<210> 5969
<211> 2151
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2152)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2065)...(198)
<223> similar to gi3319931 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5969 gcccgcggta gtaaacctgg atcctttaaa acggcccccc ctttttttt tttttaatgg 60 caaatagatt taatgcagag tgtcaacttc aattgattga tagtggctgc ctagagtgct 120 gtgttgagta ggtttctgag gatgcaccct ggcttgaaga gaaagactgg caggattaac 180 aatatctaaa atctcacttg taggagaaac cacaggcacc agagctgcca ctggtgctgg 240 caccagetce accaaggeca gegaagagee caaatgtgag agtggeggte aggetggeae 300 cagcactgaa gccaccactg gtgctggcac tggcactggc actgttattg gtactggtac 360 tggcaccagt gctggcactg ccactetett gggetttggc tttagettet getecegeet 420 ggatccgggc tttggcccag ggtccgatat cagcttcgtc ccagttgcag ggcccggcag 480 catteteega geegageeca atgeeeatte gagetttaat eteggeeeta ageettgget 540 tecaaggiga geeteagett geageettea aaateegett eeattegeee ettnetttee 600 cggggggga ctgagctgcc cattcccttt ggatccttcc ttttgtaccc ttgcaggcaa 660 acttgaagga ctttcatctt tgctggtcct catagtaaga gcgcaggccc ccagaagaac 720 tcatattcaa ggggaattgc tatgggggac tctggcatag tcccaggtac ttctgcttca 780 caaacctcat cagtgatgag cttccttcac gtcccccaag agttgaatga tgtatcccca 840 ggcgcagccc caaacttggc gcagcacctc ccagatgaca gcctcacttg gaccgatttc 900 cattcattga agatgatgct aagaagcacc atgagcagac ccagcttggg tgagtcctta 960 gtcgttccca gtatgcctgc atcagtgggc tctaaggtgc tgagaagaat gtacaagtgg 1020 tcattcttat caatttcctt caattgaatc ccaaatacct tcttccaagg aatagcctgc 1080 tcgttcaaat gatttcgggg tacacatcag tgtattcttt gatgatgtcc ttcagcatgt 1140 teegageget tgatgggaat ettegtetgg tetttageea aaaggtaett caccaaatte 1200 atttgccctc ccttgcaaaa gggccacatc cccaagntgg tggtgcttca ggctcttggg 1260 atgaactgga acttggcaac tctaacggcg aagccccttt gcctacgggc tttaaggtga 1320 tetecaaggg gagageaaag geteteeggg eecaaageaa gecaacegag teettgatge 1380 cctgcgggcc caaaaggcta tgggacccct tgaagccctg cgggccattg aggccattag 1440 agectttgag accettegge cacetgtggt tecagaagee tgaetetgat cactgetgee 1500 atcetettee ceatecagat getteacett tegggettte ttggetttga cettgggeeg 1560 agtatectga ttetectgag actgggeage tgeactetea ggeteaggtt catetgetgg 1620 ggcctgagag ggtgcagcct cagtctcctg agcctttgta ttgaccttcg tatcagccac 1680 atggctgacc tttttggtct cagtggcagg cattgtcaca gcctgcgggt cagcattctg 1740 tttcttggtg tcagctgcta gactcttgtt ttcagctgcc agaacctggg tatcagtcag 1800 ctgagtagta gatgaggcct gggtggcagg tgcctcccga gcctctgggg tctttgagac 1860

```
ctctgtggcc tttgagaccc cagaggcttt tgagaccttc acatcctctg agacctccag 1920 tgcctttgag gccttcggtg tctctgggac ctccacattc tgggtcactg tcaacagagt 1980 ctgcatcatc gagctactgt ccttttctga agcttcagcc tggaagcgag ttagacctgc 2040 accactctcg cttgtgtcag acatgtctca atttggcctg gcaagagctg agcctcgtcc 2100 tcctacaatt cccgagtgcg tccactcact ccaagcccct ccgaagctcg g 2151
```

```
<210> 5970
<211> 1790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (356)...(1535)
<223> similar to gi987265 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5970 gataagettg atategaett egtgtteetg ggttteettg gegetgegge egeegeteee 60 tetgcaactg tatgaggagg aggaggagga ggatgtgaag atggeggage tgeagatget 120 gctggaagag gaaatcccgg gggggcgccg ggccctcttc gacagataca caaatctgga 180 acgggtggcc gattactgcg agaacaacta catacagtca gcagataagc agagagccct 240 agaagaaacc aaagcctaca ccacccaatc cttagcaagt gttgcctatc tgataaacac 300 cttggacaac aatgtcctgc agatgctgga tatccaggca tcccagctac gaaggatgga 360 atcttcaatc aatcatattt cacaaacagt tgatattcat aaagagaaag ttgcaagaag 420 agaaattggt attttgacta ccaataaaaa cacttcaagg acacataaga ttattgctcc 480 agccaacctt gaacgaccag ttcgttatat tagaaaacct attgactata caattctaga 540 tgatattgga catggagtaa aggtgagtac ccagaacatg aagatgggtg ggctgccgcg 600 tacaacacct ccaactcaga agccccctag tccccctatg tcagggaaag ggacacttgg 660 geggeactee cectategea caetggagee agtgegteet ceagtggtae caaatgatta 720 egtacetage ceaaceegta atatggetee etegeageag ageeetgtga ggacagette 780 tgtgaatcaa agaaatcgaa cttacagcag cagtgggagt agtggaggga gccacccaag 840 tagtcggagc agcagtcgag agaacagtgg aagtggtagt gtgggggttc ctattgctgt 900 tectaeteca tetectecca gtgtetttee aggteatect gtacagttet acageatgaa 960 taggcetgee tetegecata etececeaac aataggggge tegttgeeet atagaegeee 1020 teetteeatt aetteacaaa caageettea gaateagatg aatggaggae ettttatag 1080 ccagaatcca gtatctcttg ctcctcctcc tccctccatc ctacaggtaa ctcctcagtt 1140 acctttaatg ggatttgtgg ccagagtcca agaaaatatt tcagatacac cacctccacc 1200 gccacctgtg gaagaaccag tetttgatga gtctccccca cctcctcctc ctccagaaga 1260 ttacgaagag gaggaagctg ctgtggttga gtatagtgat ccttatgctg aagaggaccc 1320 accgtgggct ccacgttctt acttggaaaa ggttgtggca atttatgact atacaaaaga 1380 caaggaagat gagctgtcct ttcaggaaga agccattatt tatgtcatca agaagaatga 1440 cgatggttgg tattgagggg agtttatgaa ttggagtgac ttgggttttt ttcccgggaa 1500 ttacgttgag tetattcatg cattattetg agtaaagete ageagggetg tgettgeete 1560 acaggaatag tcaggtcttc ccagattatc tgaaggccct ggggattcca ctccagtaaa 1620 gtagaatgaa ggatacaaat gataaaaatt acactttttt tttgggttat tccccagtat 1680 taaaaacaaa gcaagctgag tetgaacaaa tggatettte tgecateatt tgtacaatge 1740 tgagctgtct ggattgaaat aaaatgacca tttttatgta tgtcaaaggt 1790

```
<210> 5971
<211> 2533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(2243)
<223> similar to gi3005087 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5971 ggaatteeeg ategggagee atgagegtgg acaaagetga getatgeggg tetetgetea 60 cctggttaca gacgttccac gttccgtctc cctgtgccag ccctcaggac ctgagcagcg 120 gccttgccgt agcctatgtg ctgaaccaga tgtgagtgga gctgaagggg aggatcccaa 180 aagtgtcccc cagtctgctc atcccacctt ctcgccccca gagacccctc ctggttcaac 240 gaggcatggc tccagggcat ctcggaagat ccaggtccca actggaagct gaaggtcagc 300 aatetgaaga tggtettaeg gageetagta gagtaeteee aggatgteet ggegeateet 360 gtgtcagaag agcatctccc agatgtgagc ctcattggag agttctcaga cccggcagag 420 cteggcaage tgetteaget ggtgetggge tgtgceatea gttgegagaa aaageaggae 480 cacatecaga gaateatgae getggaagaa teggtteage atgtggtgat ggaagecate 540 caagagetea tgaccaaaga cacteetgae teeetgteae cagagaegta tggcaaettt 600 gacagccagt cccgcaggta ctatttccta agtgaggagg ctgaggaggg ggacgaatta 660 720 cagcagcgct gtctggatct ggagcggcag ctgatgctcc tgtcagagga gaaqcagagc ctggcgcaag agaatgcagg gctgcgggag cggatgggcc ggcctgaagg cgagggtacc 780 ccaggtetca etgecaagaa getgetgetg etgeaateee agetggagea gttgcaggag 840 gagaacttca ggctggagag tggcagggag gatgagcgcc tgcgctgtgc cgagctggag 900 agggaggttg cggagctgca gcaccggaac caggcgctga ctagcctggc ccaggaggca 960 caggccctga aggatgagat ggatgaacta cggcagtctt cggagcgtgc tgggcagctg 1020 gaggecacge tgaccagttg ceggegeege ttgggegage tgagggaget geggeggeag 1080 gtgcggcagc tggaggaacg caacgccggc cacgccgagc gcacgcgaca actggaggat 1140 gagetaegee gagegggete cetgegegee cagetggagg egeageggeg geaggtgeag 1200 gaactgcagg gccagctgca ggaggaggcc atgaaggccg agaaatggct atttgaatgc 1260 cgcaacctgg aggaaaagta tgagtcggtg acaaaggaga aggagcggct gttggcggag 1320 cgggactect tgcgggaggc caatgaggag ctgcgctgcg cccagetgca gccgcggggg 1380 ttgacccagg ccgatccctc actggatccc acctccacac ccgtggataa cttagccgca 1440 gagateetge etgeggaget cagggagaeg eteetgegge tteagetgga gaacaagegg 1500 ctgtgcaggc aggaggcggc cgaccgggag cggcaggagg agctgcagcg ccagctggag 1560 gatgccaacc gcgcgcgcca cgggttggag acgcagcacc ggctgaacca gcagcagcta 1620 teegagetge gggeecaggt ggaggaeetg cagaaageee tgeaggagea ggggggeaag 1680 actgaagatt ccattttgct gaaaaggaag ctggaggaac atttgcagaa gcttcatgag 1740 gcagatctgg agttgcagag gaagcgggag tacattgagg agctggagcc acccactgac 1800 agcagcacag cccggcggat cgaggagctg cagcataact tgcagaagaa ggacgcggac 1860 ttgcgggcca tggaggagcg ataccgccgc tacgtggaca aggcccgcat ggtcatgcag 1920 accatggaac ccaagcagcg gccagctgcg ggggcacctc cagaactcca ttccctgagg 1980 acacagetee gagaacggga tgteegeate egacacetgg agatggaett tgagaaaage 2040 cgaagtcagc gggagcagga agaaaagctg ctcatcagtg cctggtataa tatgggcatg 2100 gccttgcagc agcgagctgg ggaggagcgg gcgcctgccc atgcccagtc attcctggca 2160 cagcagegge tggcaaccaa ttetegeegt ggaccettgg gaegeetgge atetetgaac 2220 ettegececa etgacaagea etgacagace teacaateaa gecageetgg getecaeeea 2280 ccctggcttc ctccagctca catggcgccc agcactgggc ttcagccagg tgctcgagag 2340

```
ctttgaggcc atgatctctg ctcttccctc tcccagattg gtggggaggg agggcgggag 2400 gtagatatag gcctgttctt tttagcaatg tgattcttgt tgttgattct ctctctggag 2460 ttcatgtgct gcctcaggag actctgattt tatatttgag aaaaataaag gcgttcaatc 2520 tgcaaaaaaa aaa 2533
```

```
<210> 5972
<211> 1610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1332)...(297)
<223> similar to gi29715 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5972

```
ttttttttt ttgaaattaa attttattta aacaggtaaa aatttataca tccttttaaa
                                                                       60
aacgaaaatg caaagtcagt aagtgaatca ataatataaa cctatttata gcagtaatta
                                                                      120
aaatagaggt aacatttacc agtgtgaaaa tatcacagaa ttcaaatcac actcggatct
                                                                      180
tcaatgattc gagtgtgtat ccgacacagc gggggctggt agactgaaga tqaattcctc
                                                                      240
ccatgcatgc gccatcccca gtcaagtcct tcctcatcac cgtccaccag ctcacacagt
                                                                      300
ggggtagctg gctgctgagg caattccaca atggtttctc cggtctttgg ccatctttac
                                                                      360
gtagccaccc atgccccatt cttcacccca gctgttcttc accagcccaa tatttattqt
                                                                      420
tatccggatt ctgtgctttc aaattccgta gccaacccaa ccagcaacaa cccatgaatc
                                                                      480
catggtette aactgettae aggtetgget ecaaaataaa atgeettett tataggaaca
                                                                      540
ggaaggactc atggacctgc catcaaatag ccaaacagaa aatgggcccc cacagttggc
                                                                      600
aactggcctt catcagggcc cttctcctgc cttaagggat gtcccacaaa gccggtgtca
                                                                      660
ttagcaacag gataccttgg gattgtactt acaggattct tctgttgcct caatatggat
                                                                      720
aggattecte gagagtecag ggeetecatt ateetgaaca taetggaaag cataatecat
                                                                      780
taggcccacc attgcagcct tccattgcct tgaggcccat gagcagtcta accagattct
                                                                      840
getcaetcag tgagataage etceecagtt tteeggaaca tetgteettt aagageacea
                                                                      900
gtagcactaa aagcccaaca agaaccacac tgaccctgat tcttcacagg agtcacgtag
                                                                      960
cctttctctc tccaatccac agatctgggg gcctcataaa acagaggttc ctggaacact
                                                                     1020
ttccccttcc tgggcttacg gttttgaaag ccattcatca cctgcctgaa ttcttcactg
                                                                     1080
gtcatgtctc caaaggcgtt catggccatt gtgaagctgt gtttcccttc cctgtattcc
tgattgtgca gttcaatcat cttcatgttc ttctcccaca ctgctctcct ccatccttct
                                                                     1200
tcattcatgc cgtataatct gttgtgcatc gccttccact tggtccactg tgcctctaaa
                                                                     1260
ctgtgatcaa atgttagagt agctgaggca attcccaggc aaaaggcagc aaggatgagt
                                                                     1320
gtaggattca tgttttaaaa cctgtgtcca cccggctcgg aggctggcct gcccqctcaa
                                                                     1380
ccagtcacgc gcctccgcgg ggtcctcaac tgccctcccc ggcttcccca cctcaaggcc
                                                                     1440
agcagagttc ggggtagacg ctctcgttgc cagggctggt gcacacctac tcgaccgcgt
                                                                     1500
cetetettee agtecetgte eggecacage tgggeetgge eggeggeget tteetgetge
                                                                     1560
ggtcgtaget gcgcaggcgc actccacgga tgccgctcaa ggttgcggag
                                                                     1610
```

```
<211> 1485
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (217)...(872)
<223> similar to gi871887 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5973
ggccagcaac aagttagtat tgcagacatg ggccaaggag ccagaggcca tgcagtggct
                                                                      60
cagggtccgt gagtcgcctg gggaggccac aggacacagg gtcaccatgg ggacagccgc
                                                                      120
                                                                      180
cctqqqtccc qtctqqqcaq cgctcctqct ctttctcctq atgtqtqaqa tccctatggt
qqaqctcacc tttqacaqaq ctqtqqccaq cqqctqccaa cqqtqctqtq actctgagga
                                                                      240
cccctqqat cctqcccatq tatcctcaqc ctcttcctcc qqccqccccc acqccctgcc
                                                                      300
tgagatcaga ccctacatta atatcaccat cctgaagggt gacaaagggg acccaggccc
                                                                      360
                                                                      420
aatgggcctg ccagggtaca tgggcaggga gggtccccaa ggggagcctg gccctcaggg
cagcaagggt gacaaggggg agatgggcag ccccggcgcc ccgtgccaga agcgcttctt
                                                                      480
cgccttctca gtgggccgca agacggccct gcacagcggc gaggacttcc agacgctgct
                                                                      540
cttcgaaagg gtctttgtga accttgatgg gtgctttgac atggcgaccg gccagtttgc
                                                                      600
tgctcccctg cgtggcatct acttcttcag cctcaatgtg cacagctgga attacaagga
                                                                      660
gacgtacgtg cacattatgc ataaccagaa agaggctgtc atcctgtacg cgcagcccag
                                                                      720
                                                                      780
cgagcgcagc atcatgcaga gccagagtgt gatgctggac ctggcctacg gggaccgcgt
ctgggtgcgg ctcttcaagc gccagcgcga gaacgccatc tacagcaacg acttcgacac
                                                                      840
                                                                      900
ctacatcacc ttcagcggcc acctcatcaa ggccgaggac gactgagggc ctctgggcca
ccctcccggc tggagagctc aggtgctggt cccgtcccct gcagggctca gtttgcactg
                                                                      960
ctgtgaagca ggaaggccag ggaggtcccc ggggacctgg cattctgggg agaccctgct
                                                                     1020
totatottgq ctgccatcat coctoccago ctatttctgc toctotcttc totottggac
                                                                     1080
ctattttaag aagcttgcta acctaaatat tctagaactt tcccagcctc gtagcccagc
                                                                     1140
actteteaaa ettggaaatg catgegaate acceggggtt egtgttaaat geagattetg
                                                                     1200
acteageagg tetgagtggg teeaggatte tgtgtttete atatgtteet gggtgatget
                                                                     1260
gatggggtca gtctatgaac cacactggag caaccaggtt ctaggacttt ctcaatattc
                                                                     1320
tagtactttc tgaacattct ggaatcctcc ccacattcta gaattctccc aactactagg
                                                                     1380
gaggetgagg caggagaate gettgageae aggaggegtt ggetgeagtg agecaagate
                                                                     1440
acgccactgc actccagcct gggtaacaag agcgaaacta tcgcc
                                                                     1485
```

```
<210> 5974
<211> 1910
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (86)...(1305)
<223> similar to gi4454263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5974
eggeegegta geeegegege ggagegtace etgetgegge egttggeegt tagegegget
                                                                      60
teggeggttg tettggagaa geaagatgge ggegaeggeg geegeagtgg tggeegagga
                                                                      120
ggacacggag ctgcgggacc tgctggtgca gacgctggag aacagcgggg tcctgaaccg
                                                                      180
catcaaggct gaactccgag cagctgtgtt tttagcacta gaggagcaag aaaaagtaga
                                                                      240
gaacaaaact cctttagtta atgagagcct gaaaaagttt ttaaatacca aagacggtcg
                                                                      300
tttagtggct agtcttgttg cagaatttct tcagtttttt aaccttgact ttactttggc
                                                                      360
tgtttttcaa cctgaaacta gcacatattt taacttcttt tctagctgca aggtctcgaa
                                                                      420
ggtcgagaga atttagcccg agatttaggt ataattgaag cagaaggtac tgtgggtgga
                                                                      480
cccttattat tagaagtgat caggcgctgt caacagaaag aaaaagggcc aaccactggg
                                                                      540
gaaggtgcac ttgatctatc tgatgtacat tctccaccaa agtcaccaga gggaaaaaca
                                                                      600
agtgcacaga caacaccaag taagatacca aggtataaag gacaaggtaa gaagaagaca
                                                                      660
agcgggcaga aggctggtga caagaaggcc aatgatgagg ccaatcagag tgatacaagt
                                                                      720
gtctccttgt cagaacccaa gagcaaaagc agccttcact tactgtccca tgaaacaaaa
                                                                      780
attgtatett ttetaageaa eagaaettta gatggeaaag acaaagetgg cetttgteea
                                                                      840
gatgaagatg atatggaagg agattettte tttgatgate ceatteetaa gecagagaaa
                                                                      900
acttacggtt tgaggaagga acctaggaag caagcaggaa gtctggcctc gctctcggat
                                                                      960
geaccecet taaaaagtgg acteagetee etggegggag eccettett aaaagaetet
                                                                     1020
gagagtaaaa ggggaaatac agttttgaaa gatctgaaat tgatcagtga taaaattgga
                                                                    1080
tcacttggat taggaactgg agaagatgat gactatgttg atgattttaa tagtaccagc
                                                                    1140
categoteag agaaaagtga gataagtatt ggtgaagaga tagaagaaga cetttetgtg
                                                                    1200
gaaatagatg acatcaatac cagtgataag cttgatgacc tcacacaaga tctgactgta
                                                                    1260
teccagetea gtgatgttge ggattatetg gaagatgttg catagacaeg aagaaggaag
                                                                    1320
tattctaatt aacaaggaca gaggactgac cggttccatt ttttttttt tccaaacaat
                                                                    1380
cactcagctg gaagggeggc tetetattgg ggccttgcat ttcaaaaaacc ctgcagattt
                                                                    1440
tttttaaaag aaattttcat tttactaaac aaaatacttc ctatttgagc ccatgggggg
                                                                    1500
aaaatttaat attottaatt taactgtaca tttotttatg gaaatggatt atctacacto
                                                                    1560
agtttcatta cagggaagga acccatgaaa acatcagtgt taagagcatg atqaaaqqtq
                                                                    1620
tcaataaagc cgtaggatcg cgcaaccctt tgtgtgtgtg gctgctggta cgtgtgatct
                                                                    1680
ttgaaaacct tggctttagc cctctggaat cagagcttac ccaccatagt atattttgat
                                                                    1740
attaggtggt tctacacata gttggcaaaa tgacttggta aatttgtaat gctgaagtat
                                                                    1800
attagtataa gttaaatttg atgtgtcaac tttattttgt atttccttcc atttggaagg
                                                                    1860
tttgttagac cattaaggtt atattaaagt actcttgtgt gtgctaaaaa
                                                                    1910
```

```
<210> 5975
<211> 1238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (925)...(157)
<223> similar to gi4894624 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5975
cccccttttt tttttttta aagttacaga tagtatttaa ttggttactg tgatatcata 60
gaaataccaa gaatcataaa agtaaaaaaa gctgctaagt tgtacataat gtttccggaa 120
tactaagaag ttgctgctgg tctacagagc cctgggaggt gacggtgagg atggtcccaa 180
```

```
240
cttgttcttt ggccgaggct tcaaggcgca ataaaacagg cggaccctcc agcgatggcc
                                                                  300
ttgggcaggt cgacgccct gctccacttg tcggcctcgc ggtcgtacac ctgcacggtc
                                                                  360
ttggagaagg cagtgttctc ccagctgtag ccgcccagga tgtagatgcg gccctcccac
                                                                  420
actgccacge cegacteget gttggcgtgc agcageggeg ccaegegggt ccaetggttg
                                                                  480
cactgogggc tgtaggcctc cacgcccagc acgtcgaagc gctccatgga ctcgatgttg
                                                                  540
teategetge eccegatgga gtagatgetg teacceagge tgeacatget gtgecageeg
                                                                  600
egegeegtgg teatgggeeg eegeteetee cacaegtetg teeggtggte gtageatage
                                                                  660
aggttettge ggtaggggee aatttggtag tegtggeeee eegagatgta caegaagtet
                                                                  720
ttgtagatgg tgcccgcgtg gccgtacgtg aaccttggca agccggccac ataggaccag
                                                                  780
gagtcagtct tgggactgta cgtctctact gaagagagcg ctccgttctc attccggccg
                                                                  840
egatggecae cageatgtet tegatggagg caaggtagaa atccaeacgg egetggttea
                                                                  900
tggaggccac ctgaataaag agggcttctt caggtgggag ctctgagccc ccgaggtttc
                                                                  960
accaagatgc tetgaateee caaaagtggg atggagaege tetgagteee caaaaggggg
                                                                 1020
atggagatge tetgaacece egaacttgte tggteatgte gteageegeg tggatgggaa
                                                                 1080
ctctgtggtc acaggggtca gaattgctga tctagtggct ttatgaaata aaaattcatc
                                                                 1140
tttcctctcc ccacatcaga tttgtaaaga aagagatgct ctgccactcc gtgttaacag
                                                                 1200
agcaggacgt ggcatgggac gcgtgggtca acccaaga
                                                                 1238
```

```
<210> 5976
<211> 1869
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (31)...(1398)
<223> similar to gi780310 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5976 gcgcggcctc ctgtctgcac cggcagcacc atgtcgctca cggtcgtcag catggcgtgc 60 gttgggttct tettgetgea gggggeetgg ceaeteatgg gtggteagga caaaccette 120 ctgtctgccc ggcccagcac tgtggtgcct cgaggaggac acgtggctct tcagtgtcac 180 tatcgtcgtg ggtttaacaa tttcatgctg tacaaagaag acagaagcca cgttcccatc 240 ttccacggca gaatattcca ggagagcttc atcatgggcc ctgtgacccc agcacatgca 300 gggacctaca gatgtcgggg ttcacgccca cactccctca ctgggtggtc ggcacccagc 360 aaccccctgg tgatcatggt cacaggaaac cacagaaaac cttccctcct ggcccaccca 420 gggcccctgc tgaaatcagg agagacagtc atcctgcaat gttggtcaga tatcatgttt 480 gagcacttct ttctgcacaa agaggggatc tctaaggacc cctcacgcct cgttggacag 540 atccatgatg gggtctccaa ggccaatttc tccatcggtc ccatgatgct tgcccttgca 600 gggacctaca gatgctacgg ttctgttact cacaccccct atcagttgtc agctcccagt 660 gateceetgg acategtggt caeaggteea tatgagaaac ettetetet ageceageeg 720 ggccccaagg ttcaggcagg agagagcgtg accttgtcct gtagctcccg gagctcctat 780 gacatgtacc atctatccag ggaggggga gcccatgaac gtaggctccc tgcagtgcgc 840 aaggtcaaca gaacattcca ggcagatttc cctctgggcc ctgccaccca cggagggacc 900 tacagatget teggetettt cegteactet eectacgagt ggteagacee gagtgaceea 960 ctgcttgttt ctgtcacagg aaacccttca agtagttggc cttcacccac agaaccaagc 1020 tccaaatctg gtaacctcag acacctgcac attctgattg ggacctcagt ggtcaaaatt 1080 cettteacea teeteetett ettteteett eategetggt geteeaacaa aaaaaaatge 1140

```
tgctgtaatg gaccaagagc ctgcagggaa cagaagtgaa cagcgaggat tctgatgaac
aagaccatca ggaggtgtca tacccataat tggaacactg tgttttcaca cagagaaaaa
                                                                     1260
teactegeee tteteagagg cecaagacae eeccaacaga taccagcatg tacatagaae
                                                                     1320
ttccaaatgc tgagcccaga tccaaagttg tcttctgtcc acgagcacca cagtcaggcc
                                                                     1380
ttgaggggat cttctaggga gacaacagcc ctgtctcaaa accgagttgc cagctcccat
                                                                     1440
gtaccagcag ctggaatctg aaggcgtgag tetteatett agggeatege teeteeteae
                                                                     1500
gccacaaatc tggtgcctct ctcttgctta caaatgtcta ggtccccact gcctgctgga
                                                                     1560
aagaaaacac acteetttge ttageecaca gtteteeatt teaettgaee eetgeecace
                                                                     1620
tetecaacet aaetggetta etteetagte taettgagge tgeaateaca etgaggaact
                                                                     1680
cacaatteca aacatacaag aggeteeete ttgaegtgge aettaeeeae gtgetgttee
                                                                     1740
accttccctc atgctgtttc acctttcttc ggactatttt ccagccttct gtcagcagtg
                                                                     1800
aaacttataa aattttttgt gatttcaatg tagctgtctc ctcttcaaat aaacatgtct
                                                                     1860
gccctccaa
                                                                     1869
```

```
<210> 5977
<211> 1604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1605)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1518)...(712)
<223> similar to gi200545 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5977 60 tttatttgaa gataaactgt cttataaaag gtcagaggca atttgagatc ccagattcag 120 cttgtctcat aaaaagattc aacttcaagt agcacaattt cttgtctgct tttaatcctg 180 aacattettg aagcacgaaa cagccaactg tttacacaac acatetgtga catetgacte 240 tggcaccagt ggcgccgcag ctttcagctc tgaggcccca cgggctgcag ccctcagctt 300 tgggagggcc cagatcaggc cactgtgacc tctggctttg ccagcaacaa caggtcccag 360 cateceagee ettecetece etggeacete ecaaaageae aagaatgeaa acegagaetg 420 gcccaccact gaggcagggg tggactcccg cttgagtgtg ccaacagggc gggtggactg 480 tcctggtgac ttcctggtgg gcctggccaa ccaagaggcc aagtggcctc accaggcctt 540 acctggctgc ctggcagccc ggagaggaag gaggaaggac gctcacggtg cgacagctct 600 ggccacgctg gcgggagcta cgtgatgatc ctggcgatgg cttgcaggga ggggaagtcg 660 tcgtcccggg cagcatgcag cgcctggtgg ctgctggcat cgccatgcgc gagcacctgc 720 tggcaggtgg ggcacacacg gcagtccagg cccgcctgct gggtggtggc ctgccacgcq 780 ctcttcttgt tcttcttgga cttggtgctc agaggcttct cgcggttgca gaagtccgtg 840 tgtgcagaca ggagctcctg ctgcttggcc gtgtcgggca gcaggaccag cagctcatta 900 aagacettet ggaaattete eeccageagg teeeggeaac tettgtaata etgggetgeg 960 gagatcaggc cctgtctgaa ctcccctgag tggctcttga actcgctgaa gcgggcctcg 1020 tegetetgea ggaagteest gatggaetgg atgagetgaa ggtteetete ceggaagtte 1080 tcggggacta ggtaggcccg tggggcaggc agcagcctgg gtgcttttgt ggtggtggtg 1140

```
1200
gtggcggggc tggggacaca ggccgggtgg gggctaggca gaaggccaga gaagccaggg
ggcggcttgc tgattggggg caccaggccc ggcgggggtg ggggaggcgt gcccttcagg
                                                                    1260
agcaccacag cgctgaagcc tggggacggc ggcatccggg gtgggcaggg gccgccgagc
                                                                    1320
                                                                    1380
gctgggaagt cctcctgtgg cgtggggcag gggaaggacc ccaggggcct tgggagccca
gggggtteet tgggggcaet eegageaggg geegggeeet eegtgtgtee attaaegaeg
                                                                    1440
acggcaactg gcccctcggc tctgctggca ggagcttccg gggcctgcaa agcccctggg
                                                                    1500
ggacaggtac gcggccgggg gctgtggcaa tgtggtgcct gaattatccg agccctcttt
                                                                    1560
cttcttcttc ccaactttag cggacgcgtg ggtcgaccag ggaa
                                                                    1604
```

```
<210> 5978
<211> 650
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (424)...(634)
<223> similar to gill96424 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5978 ctcgacccac gcgtccgttc tgaactcqct tcttacctca cataattcct qccttaaaat 60 gtttaaaagt aggaaaagcc ctttgtttgg ggctcagact ttctggacat atgtccagct 120 gggccagtga tgaccttaat agacteteet gaacettttt tggtetetee agtetttgat 180 tgtcctgtaa catttctggg ggcttatccg ggattggaga tggcagattt tctgtcttct 240 ttgcctgtgg gctagagccc caggatgtgg gagatctggg gtccttggca ccqctqqqaq 300 agtttcagcc tggaaggaga atggccctcc cgcattccag agccttcccc tgacagcacc 360 aaaggaacca gtggaaaggg ttgcaggaca gtcacaggag cagtgcacag acatctgaac 420 catgttgcag gtatcatacc ttgggttctt catagccagc tgaaaccaac agcagccact 480 geccaggace agtggaceag teaacaatae ecagaceace caacaegget gateetacag 540 tgaaatcaag ccactgctga caagaacaac tgaacaactg ccctgctcca accaccag 600 aggctgggtc agtccacgca tggctgaagc ttaaggaaac atcgagccc 650

```
<210> 5979
<211> 1361
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1335)...(842)
<223> similar to gi1710229 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5979
cagttettaa acatatgaca geatateeat ataaaaatga aaaatettte agetttatge
                                                                    60
ctctatcaaa ggccaacaca tatcttcatg gaaacagttc ctgtcaggca gggaggagtg
                                                                   120
                                                                   180
agtgcctgag gaaaagttcc aagtagttta taacaaaggc acaatattag aaagactgcc
atcaatcatt ctttagattt ctttatcaca tttttcaaaa ataaacaaat cgaaccatat
                                                                   240
                                                                   300
ttgtagcaac tcaaagtgca gcatagattt aaatgatgta tttgttcagc tcactgatag
ggggcaaata ctacattaat atattttctt cctgtcaaga gttatttaca tatgtacagt
                                                                   360
                                                                   420
atttcagtta aaaatataac accataaact atattttata ggaaatcata agggaaggaa
480
                                                                   540
ggggggactt cagatcatac agtctgccat ggagaaaaga acttgctggc agacagcctg
atggttcaga ggctccagtg cccagttagc cacctggtct gcaatctttc cacagactta
                                                                   600
                                                                   660
ctgatcaggc ttgatcagga tggcccagcc atccagaaaa agcccccatc gggttcagtc
                                                                   720
ccttcggggt acagatggaa aaggcgtcaa tcactgagtg catagtatga aaggttccaa
aatctccccc agctggtata atacaatcag ttccccttca agttatggta agccatatgt
                                                                   780
gccaagcatg aaataatcag attgcaactc atcacggaag tagttaattc tgtttttcta
                                                                   840
                                                                   900
gtacagcagt gtctatgata ttccgccgct ttggttctag ggctgcaaaa aaggaaacat
cttggtcccg gtctgactgc aatgctaaga tggtctcttc aatgacttca agatgagggt
                                                                   960
taccagcatt totaaaatac goottttoca acagcatotg cottagggoo ttggctagca
                                                                  1020
gaacceteae gttgggcaca ggatetgatg cgaggeteag gaggetggga ageaggtget
                                                                  1080
ccatgaactg gtccacgggg acacactcct tgctcaccac tgcctgctcc aagaaagtca
                                                                  1140
cagccaaaga aatgatgttt tccgcagtct tctagaaaca tacacttctt taatcccaaa
                                                                  1200
gaagtcgttt cagaatctgt aggtttgagg cgtgtgtatg aatttttaaa tctcaagcac
                                                                  1260
tgatttggtt agaaacacag ttaatatttt attataattc actaccaagc agtgggttcc
                                                                  1320
                                                                  1361
aagtaggtta agatctggtg agcttaggag tcagaagtct a
```

```
<210> 5980
<211> 1962
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (175)...(1248)
<223> similar to gi34019 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5980
ccgaggctat aagagggcgc acaagtggcg cggcgcagga gccgccgcca gtggagggcc
                                                                 60
gggcgctgcg gccgcggccg gggcgggcgc agggccgagc ggacgggggg gcgcgggccc
                                                                120
ecegggagge egeggeeact eceeeeeggg eeggeggge gggggaggeg gaggatggaa
                                                                180
acaccettet aeggegatga ggegetgage ggeetgggeg geggegeeag tggeagegge
                                                                240
ggcacgtteg cgtccccggg ccgcttgttc cccggggcgc ccccgacggc cgcggccggc
                                                                300
agcatgatga agaaggacgc gctgacgctg agcctgagtg agcaggtggc ggcagcgctc
                                                                360
aagcetgege eegegeeege eteetaeeee eetgegegee gaeggegeee eeagegege
                                                                420
accecegae ggeetgeteg eeteteeega eetggggetg etgaagetgg eeteeeega
                                                                480
getegagege eteateatee agteeaaegg getggteaee aecaegeega egageteaea
                                                                540
gttcctctac cccaaggtgg cggccagcga ggagcaggag ttcgccgagg gcttcgtcaa
                                                                600
660
egeegeegee geegggggge cetegggeae ggeeaeggge teegegeeee eeggegaget
                                                                720
```

```
ggecceggeg geggeegege cegaagegee tgtetaegeg taacetgage agetaeegeg
                                                                  780
                                                                  840
ggeggetgee gggggetgeg gggtggegee gegaegagte geettegetg eegaacetgt
geoetteeeg eegeegeeac eeceaggege gttggggeeg eggeggeetg getggegett
                                                                  900
                                                                  960
caaggacgaa ggccccagac ggtgcccgac gtgcccgagc ttcggcgaga gccccgccgt
                                                                 1020
tgtcgcccat tgaaacatga cacgccaagg cgcatccaag gcgaagcgca agcggctggc
gcaaccegca aattegeget ccaaagceeg caagcegcaa getgggageg caatetegeg
                                                                 1080
cactggaaag agaaagtgaa gacccctcat agagtccaga acacggcagc ctggcgtcca
                                                                 1140
eggegageet getgegegag eaggtggege ageteaagea gaaagteete ageeaegtea
                                                                 1200
acageggetg ceagetgetg ecceageace aggtgeeege gtaetgagte egegegeggg
                                                                 1260
gegeatgege ggecaecete eccaagggge gggetegegg gggggtgteg tgggegeece
                                                                 1320
ggacttggag agggtgcggc cctggggacc ccccctccc cgagtgtgcc caggaactca
                                                                 1380
gagagggcgc ggccccggg gattcccccc cgagggtgcc caggactcgg aaggggcgcc
                                                                 1440
ceggactega caagetggac eccetgetee egggggggeg agegeatgac ecceeegeee
                                                                 1500
tegegetgee tettteecce gegeggeege ceegtgttge acaaacceeg egegtetegg
                                                                 1560
etgeceettt gttacacege geegeggaag tggggeteeg agggggegea geeteaaace
                                                                 1620
ctgcctttcc tttactttta ctttttttt tttttttct ttgggaagag agaagaacag
                                                                 1680
agtgttcgat tctgccctat ttatgtttct actcgggaac aaacgttggt tgtgtgtg
                                                                 1740
1800
ettteetega tetegeteee eeetteggtt etttegaeeg gteeeeete eettttttgt
                                                                 1860
tetgttttgt tttgttttge taegagteca catteetgtt tgtaateett ggttegeeeg
                                                                 1920
gttttctgtt ttcagtaaag tctcgttacg ccaaaaaaaa aa
                                                                 1962
```

```
<210> 5981
<211> 913
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (214)...(822)
<223> similar to gi1289278 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5981
acceacgegt gegetetgat tageageaga tttattatte ttteeteatt teatgttata
                                                                       60
cttaataaaa caaaacatac ctgtatacac acacattcac tcacattgaa gatgcaagat
                                                                      120
gaagaaagat acatgacatt gaatgtacag tcaaagaaaa ggagttctgc ccaaacatct
                                                                      180
caacttacat ttaaagatta ttcagtgacg ttgcattggt ataaaatctt actgggaata
                                                                      240
totggaaccg tgaatggtat totcactttg actttgatct cottgatcct gttggtttct
                                                                      300
cagggagtat tgctaaaatg ccaaaaagga agttgttcaa atgccactca gtatgaggac
                                                                      360
actggagatc taaaagtgaa taatggcaca agaagaaata taagtaataa ggacctttgt
                                                                      420
gcttcgagat ctgcagacca gacagtacta tgccaatcag aatggctcaa ataccaaggg
                                                                      480
aagtgttatt ggttctctaa tgagatgaaa agctggagtg acagttatgt gtattgtttg
                                                                      540
gaaagaaaat ctcatctact aatcatacat gaccaacttg aaatgtccct cgtccacatt
                                                                      600
ttaggetttt atacagaaaa acctaagaca attaaactac gtatggattg ggettaactt
                                                                      660
tacctccttg aaaatgacat ggacttgggt ggatggttct ccaatagatt caaagatatt
                                                                      720
cttcataaag ggaccagcta aagaaaacag ctgtgctgcc attaaggaaa gcaaaatttt
                                                                      780
ctctgaaacc tgcagcagtg ttttcaaatg gatttgtcag tattagagtt tgacaaaatt
                                                                      840
cacagtgaaa taatcaatga tcactatttt tggcctatta gtttctaata ttaatctcca
                                                                      900
ggtgtaagat ttt
                                                                      913
```

```
<210> 5982
<211> 2452
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2453)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1979) ... (331)
<223> similar to gill18097 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5982 aaactgagca ctgtccccca antgctttct tggcaatgaa gttccgttgc ctggctccta 60 gaaattggtg aaatcagcaa gacggaagaa ggagtcaact tgggccaagc cctgttggag 120 aatggcatca tccaccatgt ttccgacaag caccagttca agaatgagca ggtgatgtat 180 cgcttccgct acgacgatgg cacctacaag gcccgaagtg agctggagga catcatgtcc 240 aagggtgtga ggctttactg ccgtcttcac agcctctaca ccccggtgat caaagaccgt 300 gattaccacc tgaagaccta caagtcagtg cttcccggga gcaagctggt ggactggctg 360 etggeteagg gagaetgeea gaetegggag gaggeagtgg egeteggegt gggtetgtge 420 aacaatggct tcatgcacca cgtgctggag aagagcgagt tcagggatga gtcccagtac 480 ttccgctttc atgctgacga ggagatggag gggaccagca gcaagaacaa acagcttcgc 540 600 aacgacttca agctggtgga gaacattctg gccaagcgcc tgctgatcct gccccaggag gaggactatg gctttgacat cgaggagaag aacaaggctg tggtggtgaa gtccgtccag 660 aggggctcgc tggctgaggt ggctggcctg caggtgggga ggaagatcta ctccatcaat 720 gaggacctgg tgttcctgcg gccgttttca gaggtggagt ccatcctcaa ccagtccttc 780 tgctcccgcc gccctctgcg cctcctggtg gccacgaagg ccaaagagat catcaaaatc 840 ecegaceage eggacacact gtgettecag attegtggag etgececace gtacgtetat 900 gctgtgggga gaggctctga ggccatggct gcagggctct gtgctggtca gtgcattctg 960 aaggtcaatg gcagcaacgt gatgaacgat ggtgcccctg aggtcctgga gcacttccag 1020 gcattccgga gtcggcgcga agaggccctg ggcctgtacc agtggatcta ccacacccat 1080 gaggatgccc aggaagcacg agccagtcag gaggcctcca ctgaggaccc cagtggcgag 1140 caggeccagg aggaageeca ggetgattea geetteecae tgetgteeet gggteecegg 1200 ctgagcctgt gtgaggacag ccccatggtc accctgactg tggacaacgt gcacctggaa 1260 cacggcgtgg tgtatgagta tgtgagcacg gcaggcgtca ggtgccatgt gctggagaag 1320 ategtggage ecegeggetg ttteggeete acegeeaaga teetegagge etttgetgee 1380 aatgacagcg tcttcgtgga gaactgcagg cggctcatgg ccctgagcag cgccatcgtg 1440 accatgecce actitigagit cegeaacate tgtgacacea agetggatag cattggecag 1500 aggattgeet getaceagga gtttgeagee caactgaaga geagggteag eccaceette 1560 aaacaagece eeetggagee eeaceegetg tgtggeetgg aettetgeee caccaattge 1620 cacatcaacc tcatggaagt gtcctacccc aagaccaccc cctcagtggg caggtccttc 1680 agcatecget ttggaegeaa accetecete ateggeettg acceggagea aggeeacetg 1740 aaccccatgt cgtacaccca gcactgcatc accaccatgg ctgctccctc ctggaagtgc 1800 ttgcctgctg cagagggtga tccccaaggc cagggtctcc atgatggcag cttcgggcca 1860 gccagtggga cccttggtca ggaagaccgg ggcctcagct tcctactcaa gcaggaggac 1920

```
cgtgagatcc aggatgccta cctgcagctc ttcaccaagc tggatgtggc cctgaaggag
                                                                    1980
atgaagcaat atgtcaccca gatcaacagg ctgctgtcca ccatcacaga gcccacctcg
                                                                    2040
ggtgggtcct gcgacgcatc cttggctgag gaggcctcct ccctgcccct ggtcagtgaa
                                                                    2100
gagagcgaga tggacaggag tgaccatggg ggcatcaaga aggtgtgctt caaggtggcc
                                                                    2160
gaggaggacc aggaggactc aggccacgac accatgagtt atcgcqactc ctacaqcqaq
                                                                    2220
tgtaacagca atcqagactc ggtcctgtcc tacaccagcg tgagaagtaa cagctcctac
                                                                    2280
ttgggcagcg acgagatggg gtctggagat gagctgccct gtgacatgcg gatcccatct
                                                                    2340
gacaagcagg acaagcttca tggctgcctg gagcacctct ttaaccaggt ggactccatc
                                                                    2400
aatgctctcc tcaaggggcc agtcatgagc cgggctttcg aagagaccaa ag
                                                                    2452
```

```
<210> 5983
<211> 544
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(463)
<223> similar to gi198609 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5983
cccacgcgtc cgaggctcta actttctgtt atgtcctcaq taqcaqaqat qtcacaqtqq
                                                                       60
agaggagccc ttggaatata atgagtatga ggaaqttqtc acaqctcaac attgactcag
                                                                      120
catgtgttag ctcccactgg agggaaactc cataaatgta atgaatgtag gaaacacctc
                                                                      180
atccagagag ttaactttta ttcataccaa agaactcttt gtctgtagtc agtgtggaaa
                                                                      240
tgccttcagt gaccatttat cctttaaaca acaccgtgaa ttaacactgg agagaagcca
                                                                      300
tatgaatatg atctgtgtgg gaaagccttc atttaatgat ctcaccttag tcataatgag
                                                                      360
acaatgcaca tggagagaaa ccctataaat gtacagcatt tggaacagcc ttcaacctca
                                                                      420
gccctaacct ttataggtgg tctcactcaa gtttccatct atctgaaaga tgccatcttt
                                                                      480
tagataccag agagetecca cagggetaaa cectacacce tteaggeaaa geteaageet
                                                                      540
tgta
                                                                      544
```

```
<210> 5984
<211> 2978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2933)...(558)
<223> similar to gi5305335 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5984 agtegaegat ttegtgeegg eggetattte tatteeeagg aaateeeegg geeatetgtg 60 accaacaaag geeegageee eeceaceee gegageeeaa caacagggee caacggeeee 120 tggctccggg gtggggggat cgggcctgga tcggctgccg gtgcctgcca gtgggggtta 180 ggcttgctga ggggcaggca caggagtcct ggctgagctc atggcctgag gctgcctagc 240 ggccacgggg aatggttgca atggcggagg cagaggcagg ggtggcagtg gaggtccgtg 300 gactgccccc tgccgtgccc gacgagctgc tcactctcta ctttgaaaac cgccgacgct 360 ctggaggggg acctgtgttg agctggcaga gactgggctg tgggggggtc ctcaccttca 420 gagageetge agacgeegag agggtettgg eecaggeaga teaegaacta catggtgeee 480 agetgageet geggeeaget ceaecaegag eccetgeaeg eetgetgete eaaggaetge 540 eccetggeae caegececag egettggage ageatgteca ggeettgetg egggeetegg 600 ggeteccagt acageettge tgtgeettgg ccageeceeg gecagacegg getetggtee 660 agttgcccaa gcccctttct gaggcagatg tccgtgtcct ggaggagcag gcccagaatc 720 tgggcctgga ggggaccttg gtgtccctgg cccgggttcc ccaggcccga gcggtgcgtg 780 tggtggggga tggtgcctct gtggacctgc tgttgctgga gttgtacctg gagaatgagc 840 gccgcagtgg tggggggccc ctggaggacc tgcaacgcct acccgggccc ctgggcactg 900 ttgcctcctt ccagcagtgg caagtggcag aacgagtgtt gcagcaggag caccggttgc 960 agggctcaga gctgagcctt gtcccccact acgacatcct ggagcccgag gagctggctg 1020 agaacaccag tggaggggac cacccgtcca cccaggggcc tagggctacc aagcatgctc 1080 teetgaggae eggagggttg gtgaeggete tgeagggtge agggaetgtg acaatggget 1140 ctggcgagga accagggcag tcaggggcct ctctgaggac aggtcccatg gtgcagggta 1200 gagggattat gacaacaggc tctggccagg aaccagggca gtcagggacc tctctgagga 1260 caggtcccat ggggtctctg ggacaggcag agcaagtcag ctcgatgccc atggggtctc 1320 tggaacatga ggggctggta agcctgaggc ctgtggggtt gcaggaacag gaggggccca 1380 tgageetggg geetgtgggg tetgeaggee eagtggagae etetaagggg ttgetgqqqe 1440 aggagggcct ggtggaaatt gccatggact caccagagca agaggggctg gtgggtccca 1500 tggagatcac catggggtct ctggagaagg cagggcctgt gagcccagga tgtgtgaagc 1560 tggcagggca ggagggcctg gtggagatgg tgctattgat ggagccaggg gcgatgcgct 1620 tectgeaget ctaccatgag gacettettg egggeetggg agaegteget etettgeeae 1680 ttgaaggacc ggatatgact ggctttcggc tctgtggagc ccaggcttcc tgccaggcgg 1740 ctgaggagtt tctgcggagc ctgctgggca gcattagctg ccatgtgttg tgcctggagc 1800 accogggcag cgccaggttt ctcctgggcc cagaagggca gcaccttctc caggggctgg 1860 aggeteagtt ceagtgtgte tttgggacag agegeetgge cacageeaeg ttggacaeag 1920 gccttgaaga ggtggaccct accgaggccc tcccagtgct ccctggcaac gcccacaccc 1980 tgtggacccc agacagtaca ggtggtgacc aggaggacgt gagcctggag gaggtccgag 2040 aactgctggc caccctggag ggcctagacc tagacgggga ggactggctg cctcgggagc 2100 tggaggagga agggcctcag gagcagccag aggaggaggt gaccccaggg catgaggagg 2160 aggagectgt ggeececage actgtggeac ceaggtgget ggaggaggag geegetetge 2220 agctggccct ccaccggtca ctggagcctc aaggtcaggt ggctgagcag gaggaggctg 2280 ctgccctgcg gcaagcccta accctctccc tgctggagca gcccccgttg gaggcagaag 2340 agcccccaga tggggggact gatggcaagg cccagctggt ggtgcactcg gcctttgagc 2400 aggatgtgga ggagctggac cgggcgctca gggctgcctt ggaggtccac gtccaggagg 2460 agacggtggg gccctggcgc cgcacactgc ctgcagagct gcgtgctcgc ctggagcggt 2520 gccatggtgt gagtgttgcc ctgcgtggtg actgcaccat cctccgtggc ttcggggccc 2580 accetgeeeg tgetgeeege caettggtgg caettetgge tggeeeetgg gateagagtt 2640 tggcctttcc cttggcagct tcaggcccta ccttggcggg gcagacgctg aaggggccct 2700 ggaacaacct ggagcgtctg gcagagaaca ccggggagtt ccaggaggtg gtgcgggcct 2760 tctacgacac cctggacgct gcccgcagca gcatccgcgt cgttcgtgtg gagcgcgtgt 2820 cgcacccgct gctgcagcag cagtatgagc tgtaccggga gcgcctgctg cagcgatgcg 2880 ageggegeee ggtggageag gtgetgtace aeggeaegae ggeaeeggea gtgeetgaea 2940 tctgcgccca cggcttcaac cgcagcttct gcggccgc 2978

```
<210> 5985
     <211> 609
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (224)...(211)
     <223> similar to gi2323284 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5985
tgaccgttac ctgtaccgga catgcccgga gtcgacgatt tcgtcagtta aaacagataa
                                                                       60
attcacccac agaaaacaat tagggctcta cgtggcacaa ctgtagttca caaaagcaac
                                                                      120
ctcctgaaat ctgtccttaa tgtaaacagc catcccactg caaaaaaagt tqccataaac
                                                                      180
ttaagctatc taaatggact tcttcattta tctctttggc ttctccttta aaatgaaggg
                                                                      240
gttctgagga cacattgggg tttttcccag tcctttcttt taatcacctc acagaaaact
                                                                      300
ttctccaaat tggcagtgaa gttctgacta ttcttgtaga cacaggagca accatattgg
                                                                      360
tecteageee caccagtete aaccageeae ggtgttggaa taataaaaat atteaaatag
                                                                      420
tgggagtttc taataaacca ttgacaacct ttctgtccca gcccattact ttttgccttg
                                                                      480
gacgtttaca ggatattcat ccctttttat tggtgaaatc tgcttcagct catttattgg
                                                                      540
gacaagactt aaaacaaaaa ataaaatcat gatgacatct ctttctcctt aaaagggaga
                                                                      600
cataatttt
                                                                      609
     <210> 5986
     <211> 3068
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2804)...(466)
     <223> similar to gi189400 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5986
ttttttttt ttgatggttc aacaagtgtt tattgagcag ccacatctgc caggtcttgg
                                                                       60
gatagecagt ceetgtgete atgggettag atectggeag aggeetagtg gagaggettg
                                                                      120
gggtggggt cggggcatgg aaggctgtgc tattggccag ggactcagaa tacaggagag
                                                                      180
tgcaagggtg acagaagttt ctttcttggg caaagaggcc tggaaatggt ggcttgaatc
                                                                      240
teaaceatte ettageette ceeteteaag eeagagaaag acceaggtet eeeetgeeea
                                                                      300
gaaggtccat gcatagacat tcattccgtt gattcattcc ttaaccaaga aataaagagt
                                                                      360
tgcactcctt gcaggggctg gtaaaagcaa tgggctggag gaggcagctc aggggccggg
                                                                      420
gaaggggtgt tggctgcaag gttacaagag aaggggtagc actctcagag gcctgcttga
                                                                      480
cgggcgcctg ggacttggct gatggggggc ctttctgggg cacagggtgg tgggaatgta
                                                                      540
attggagagg cttccagagg cacttggact tgagaggcct ccatggagcc tctgacagag
                                                                      600
tecceagggg ggacaacatg etecaagagt etgggetetg cetteceetg ecceaceae
                                                                      660
```

```
ggaagacatg tcaagctggg aagccatgga ggagaagggg agggcaaaaa agttgttgag
                                                                    720
                                                                    780
ccactgggat aaatgggagg agccccggag ggagcggctg cgggatcgca cagccctcg
                                                                    840
tatccggtgg ggtgggctga tgcccctttg ccactgggat aaatgggagg agccccggag
                                                                    900
ggageggetg egggategea eageceeteg tateeggtgg ggtgggetga tgeeeetttg
                                                                    960
cagctgggca ggatgttcct gggcattggc aggatggttg aggggccctg tgatggcagg
                                                                   1020
aqtqctqqct tqqaccacat qggqaqacca aqtccgaata gggqcccgat gcaattqagg
                                                                   1080
gtgcaagcgg agggcatggc gaaggcggat ggctctctgt gctctgtaca acaggtagcg
gateceaegg tggaeggeag ggegeteetg gtgateagga ggetegetgt gaggeteage
                                                                   1140
                                                                   1200
atcgggggtg gcagcctgct cagcgggctg gtggggaggc caagctgggg ggtggtatgt
                                                                   1260
ggctggcgag gagtgggctg gcgaggagtg ggctggcgag gactgtggct cggcggtctc
                                                                   1320
                                                                   1380
catgggctcc atgcacgagt tttcggcatc tgagtcttcc gagctgctga tcaccacaac
                                                                   1440
gegtteetet eeetaeetge eteeeeggeg ceaetggeea egtggttget gttgggeagg
aagaceteae tteetatgae ggggeteetg gggetaggeg gteeateeag gtggggtggt
                                                                   1500
gagactgcct tggaggtgct gggcctgggc tgctccgggg agctccgagc caaccttgcc
                                                                   1560
tectteeect ceteagacte catettgatg acetteetgg ggeactgggt etggetgeac
                                                                   1620
ttcctcttct gggctgtcgt tgtattggag acatcctctc cataggaagg gcctttgatg
                                                                   1680
gagaaggcgt acactggcac ggggtgtgcc ccgggcactg actgtaccac agccataggc
                                                                   1740
tgggettcag eccaececag ggeetgaace tgggeettca etetetetge eteeteggge
                                                                   1800
aggtcaacgt caatagggtc cctgggagtg ctggcagcct ctgggctggc tttcttggat
                                                                   1860
acagetgeat ettteecetg ggtgatgeaa gagetgaggt eetgeaggeg eacettgaae
                                                                   1920
tegtegaage categgtgeg caeggeaget tgeaggetet ggggeteete etggegeagg
                                                                   1980
eggeagageg cetggegeag gaaacegtge atgteeagea ceteetggte egaggegtag
                                                                   2040
cactteatee tetgeaceag egegetgeee gtgeggatge getgeageac ageateeagg
                                                                   2100
eggeceagec gaetggecat etectegtag tegegetggt acegegegte caeagectee
                                                                   2160
ageagetege geteetgage eegeaegtga getaceaeet ggggeaegeg etegeggate
                                                                   2220
ageteetegg teteggeacg egegeggeee agetggeega eggeegegtg catetgtgtg
                                                                   2280
tgaaccgcgc caaaggcact atcctgctcc tgcagcgcct gcgtcatggc gtccagctcc
                                                                   2340
teetgteget getggatete tgegetgatg tegeaettga geteaetgtg getgetgtea
                                                                   2400
aggagegege aegageagea cageggettg gaacateete ggeagtagat getggteage
                                                                   2460
                                                                   2520
gtaggggtgc ggtggttggg gttggagcag aagatgttgt tggtcttgcg ggtgccgtcc
aggaactcac gcaccgactg gttgcgcagc tctgctaggg gccgggcctc gtgcttgagg
                                                                   2580
aaccactggt gtgcctcgaa gcacttggcg cagaggagct gctcgcactc aaagcaccag
                                                                   2640
gaagteggee gaetetttge agegggtgea cacageetge geateeacaa tetgeeggta
                                                                   2700
caccgacagg cgccgctgca gactctcgaa aaagacgtta tccagggcgg gtqtgtctgc
                                                                   2760
acctaggggc cagggcgcct ggcagatggg gcactgcatg cccgacgcct ccaggcatcc
                                                                   2820
                                                                   2880
tgagcacagc gtgtgcagac aaggcagcag cttcgggcac ttggcttccg cctggcattg
ctggcagcgc agaaactgga actcctcctc cgaagcgggg gctcgctctg tagggctggg
                                                                   2940
gctggggctg ggctggcggc cttcagaggg ggtctcgggg ggaggcatgg tgggctcctg
                                                                   3000
gggccgggcg gggtcctgct ggggcctcgg agatcgggcg ggtgcaggct ccatggaccc
                                                                   3060
cagcttag
                                                                   3068
```

```
<210> 5987

<211> 3043

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3044)

<223> n = a,t,c or g
```

<221> misc_feature <222> (3013)...(1673) <223> similar to gi2765425 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5987

60 caggtgcagc tgctcgagtc tgggggaggc ggggtccagc ctgggaggtc cctgagactc 120 tectgtgeag egtetggatt taaetteagg acetatggea tgeaetgggt eegecagget ccaggcaagg gactggagtg ggtgacattt atatggtctg atgggagtat caaatactat 180 240 aaagactccg tgaagggccg gttcaccgtc tccagagacg attcccggaa cacattatat 300 ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaaacagcg 360 gacgntgact acgtgcggga ctactattat tactacatgg atgtctgggg caaagggacc 420 acggtcaccg tetectcage etccaccaag ggcccatcgg tettecceet ggcaccetce 480 tecaagagea eetetggggg eacageggee etgggetgee tggteaagga etaetteece 540 gaaccggtga cggtgtcgtg gaactcaggc gccctgacca gcggcgtgca caccttcccg 600 getgteetae agteeteagg actetactee eteageageg tggtgacegt geceteeage 660 agettgggca eccagaceta catetgeaac gtgaateaca ageccageaa caccaaggtg 720 gacaagagag ttgagcccaa atcttgtgac aaaactcaca catgcccacc gtgcccagca 780 cctgaactcc tggggggacc gtcagtcttc ctcttccccc caaaacccaa ggacaccctc 840 atgatetece ggacecetga ggteacatge gtggtggtgg acgtgageca cgaagaceet 900 gaggtcaagt tcaactggta cgtggacggc gtggaggtgc ataatgccaa gacaaagccg 960 egggaggage agtacaacag cacgtacegt gtggtcageg teetcacegt cetgcaceag 1020 gactggctga atggcaagga gtacaagtgc aaggtctcca acaaagccct cccagccccc ategagaaaa ccatetecaa agccaaaggg cageeeegag aaccacaggt gtacaceetg 1080 cccccatccc gggatgaget gaccaagaac caggtcagcc tgacctgcct ggtcaaaggc 1140 ttctatccca gcgacatcgc cgtggagtgg gagagcaatg ggcagccgga gaacaactac 1200 aagaccacge etecegtget ggacteegae ggeteettet teetetacag caageteace 1260 gtggacaaga gcaggtggca gcaggggaac gtcttctcat gctccgtgat gcatgaggct 1320 1380 ctgcacaacc actacacgca gaagagcctc tccctgtctc cgggtaaatg agtgcgacgg ceggeaagee ceegeteece gggetetege ggtegeacga ggatgettgg caegtaceee 1440 ctgtacatac ttcccgggcg cccagcatgg aaataaagca cccagcgctg ccctgggaag 1500 tatgtagacg gggtacgtgc caagcatcct cgtgcgaccg cgagagcccg gggagcgggg 1560 1620 gettgeegge egtegeacte atttaceegg ggacagggag aggetettet gegtgtagtg 1680 gttgtgcaga gcctcatgca tcacggagca tgagaagacg ttcccctgct gccacctgct 1740 cttgtccacg gtgagcttgc tatagaggaa gaaggagccg tcggagtcca gcacgggagg 1800 egtggtettg tagttgttet eeggetgeee attgetetee caetecaegg egatgteget gggatagaag cetttgacca ggcaggtcag getgacetgg ttettggtca tetecteeeg 1860 ggatggggc agggtgtaca cctgtggttc tcggggctgc cctttggctt tggagatggt 1920 1980 tttctcgatg ggggctggga gggctttgtt ggagaccttg cacttgtact ccttgccatt cagccagtcc tggtgcagga cggtgaggac gctgaccaca cggtacgtgc tgttgtactg 2040 ctcctcccgc ggctttgtct tggcattatg cacctccacg ccgtccacgt accagttgaa 2100 2160 cttgacctca gggtcttcgt ggctcacgtc caccaccacg catgtgacct caggggtccg ggagatcatg agggtgtcct tgggttttgg ggggaagagg aagactgacg gtccccccag 2220 gagttcaggt gctgggcacg gtgggcatgt gtgagttttg tcacaagatt tgggctcaac 2280 tttcttgtcc accttggtgt tgctgggctt gtgattcacg ttgcagatgt aggtctgggt 2340 2400 geceaagetg etggagggea eggteaecae getgetgagg gagtagagte etgaggaetg 2460 taggacagec gggaaggtgt gcacgccgct ggtcagggcg cctgagttcc acgacaccgt 2520 caccggttcg gggaagtagt cettgaccag gcageccagg gccgctgtgc ccccagaggt 2580 gctcttggag gagggtgcca gggggaagac cgatgggccc ttggtggagg ctgaggagac 2640 ggtgaccagg gttccctggc cccagacctc catgaagtag taataggatc ataataatat 2700 gtccccgtta taggggacgt cgcacagtaa tagacagccg tgtcctcgac tctcaggctg ttcatttgca ggaacaggga attctgggaa tcgtctctgg agatggtgaa tcggcccttc 2760 acggagtctg cgtaggatgt agtatcacca ctactagtga tgtacgaaat ccactccagc 2820 ccctggcctg gagcctgacg gacccagttc atggcataat catcaaaggt gaatccagag 2880

```
gctgcacggg agagtctcag ggacctgcca ggctgtacga agcctccccc tgactcctgc 2940 agctgcacct gacactggac acctcttaaa agagcaacga ggaaaaccca gctcagccca 3000 aattccatgg tgagttctct gtgtgcagtc ctgatcagca cgc 3043
```

```
<210> 5988
<211> 6097
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (193)...(4255)
<223> similar to gi4589512 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5988 acgtcagtgc agggggactc ccagggcacc cccacctcca gccagggcag catcaatatg 60 gagcactgga tcagccaggc catccacggc tccaccacgt ccaccacctc ctcgtcctct 120 acgcagagcg ggggcagcgg ggctgcccac aggctggcgg atgtcatggc tcagacccac 180 atagaaaatc attctgcacc tcctgacgta accacgtaca cctcagagca ctcgatacag 240 gtggagagac cgcagggttc cacggggtcc cggacagcgc ccaagtacgg caacgccgag 300 ctcatggaga ccggggatgg agtaccagta agtagccggg tgtcagcaaa aatccagcag 360 cttgtcaata ccctcaaacg accgaaacga ccacctttac gagaattctt tgtcgatgac 420 tttgaagaat tattagaagt tcaacaaccg gatccgaacc aaccaaagcc ggaggggcc 480 cagatgetgg ccatgegegg agageagetg ggegtggtca egaactggee geegtegetg 540 gaggccgcac tgcagaggtg gggcaccatc tcgcccaagg cgccctgcct gaccaccatg 600 gacaccaacg ggaagcccct ctacatcctc acttacggca agctgtggac aagaagtatg 660 aaggtegett acagcattet acacaaatta ggcacaaagc aggaacccat ggteeggeet 720 ggagataggg tggcactggt gttccccaac aatgatccgg ctgccttcat ggcggctttc 780 tacggctgcc tgctggccga ggtggtcccc gtgcccatcg aggtgccact caccaggaag 840 gacgcaggga gccagcagat aggtttcttg cttggaagct gtggagttac tgtagccttg 900 actagtgacg cctgccataa aggacttcca aaaagcccaa cgggagagat cccacagttt 960 aaaggttggc caaagctgct gtggtttgtc acagagtcta aacatctctc caaaccgccc 1020 cgagactggt tttccacaca ttaaagatgc caataacgac actgcgtata ttgagtacaa 1080 gacgtgtaag ggatggcagt gtgctgggtg tgacggtgac gaggactgcg ctgctgacac 1140 actgccaggc cctgacgcag gcgtgtggct acacggaagc tgaaaccatt gtgaatgtgc 1200 tggatttcaa gaaggacgtc gggctctggc atggcatcct gacaagcgtc atgaacatga 1260 tgcatgtgat cagcatcccg tactcgctga tgaaggtgaa ccctctctcc tggatccaga 1320 aggtetgeca gtacaaagca aaagtggegt gtgtgaaate gagggatatg cattgggeat 1380 tagtagcaca cagagatcag agagacatca accteteete tetgegaatg etgatagtgg 1440 eggaeggege gaacceetgg tetatttett ettgegatge attteteaat gtetteeaaa 1500 gtaaaggcct tcgacaggag gtcatctgtc cttgtgccag ctcgccagag gccctcactg 1560 tggccatccg gaggcccacg gatgacagta accagccccc gggccggggt gtcctctcca 1620 tgcatggact gacctatggg gtcattcgtg tggactcgga agagaagctg tccgtgctca 1680 ccgtgcagga tgtcggcctc gtgatgcctg gagccatcat gtgttcagtg aagccagacg 1740 gggttcctca gctgtgcaga acggatgaga tcggggagct gtgtgtgtgt gcagttgcta 1800 cgggcacgtc ctactatggc ctctctggca tgaccaagaa cacctttgag gtgtttgcca 1860 tgaccagete eggggeteeg atcagtgaat acceatteat aaggacagge ttgetggggt 1920 tcgtgggtcc cggaggcctc gtcttcgtgg tgggcaagat ggatggcctc atggtggtca 1980 gcgggcgcag gcacaacgcc gacgacatcg tggccactgc gctggccgta gaacccatga 2040

```
agtttgtcta ccggggaagg atagccgtgt tctcggtgac cgtgctgcac gacgagagga
                                                                     2100
                                                                     2160
tegtgategt ggetgageag aggeetgaet ceaeggaaga ggaeagttte cagtggatga
gccgtgtgct gcaggcgatt gacagtatac atcaagttgg agtttattgc ctggccttgg
                                                                     2220
tgccagcaaa caccctcccc aaaaccccgc ttggtgggat ccatttatca gaaacaaaac
                                                                     2280
                                                                     2340
agetttttet ggagggetet etgeacecet geaatgteet aatgtgeece eacacetgeg
tcacaaactt gcctaagcct cgacagaagc agccagaaat cggccctgcc tctgtgatgg
                                                                     2400
tggggaacct ggtctctggg aagagaatcg cccaggccag tggcagagac ctgggtcaga
                                                                     2460
tegaagataa egaceaggea egeaagttee tgtteetete agaggtettg eagtggagag
                                                                     2520
cacagaccac cccggaccac atcetetaca cgctgeteaa ctgtcggggt gcgatagcga
                                                                     2580
actogotgac otgogtgcag otgoacaaga gagotgagaa gatogoogtg atgotgatgg
                                                                     2640
                                                                     2700
agaggggcca cetteaggae ggegaeeaeg tggeettggt etaeeeeeea ggaatagaee
tgatagcagc gttttatggt tgcctgtacg caggctgtgt gccaataacc gtccgtcccc
                                                                     2760
cgcacccaca gaacatcgcg acgacgttgc ctaccgtcaa gatgattgtg gaggtgagtc
                                                                     2820
                                                                     2880
getetgeetg tetgatgaeg acacagetga tetgtaagtt getgeggtee agggaggegg
cggcggctgt ggacgtcagg acgtggcccc tcatcctgga cacagatgat tagccaaaga
                                                                     2940
                                                                     3000
ageggeetge ceagatetge aaacettgea acceagacae tettgeatat etegaettea
gegtgtecae aactgggatg ctagetggeg taaagatgte teaegeagee accagtgeet
                                                                     3060
tetgeegtte cattaagetg cagtgtgaac tttaccecte tagaqaaqtq gecatetgee
                                                                     3120
tggaccetta etgtggactg ggatttgtee tetggtgeet etgeagtgtg tattetggge
                                                                     3180
accagtecat cetgateceg ecetetgage tggaaaccaa eccegeettg tggettettg
                                                                     3240
ccgtgagtca gtacaaagtc cgagacacgt tttgctccta ctccgtgatg gagctgtgca
                                                                     3300
ccaaggggct gggctcgcaa acagagtccc tcaaggcgcg agggctggac ttgtcccgag
                                                                     3360
tgaggacctg cgtggttgtg gcggaagaga ggcctcggat cgcgctcaca cagtcgttct
                                                                     3420
caaagetgtt taaggacetg ggeetteace egegggeegt eageaceteg tteggttgea
                                                                     3480
gggtgaacct ggcgatttgc ttgcagggaa cctcaggacc tgacccaacc actgtctacg
                                                                     3540
tggacatgag agccctgaga cacgacagag tccgcttagt ggaaagagga tcccctcata
                                                                     3600
gtctgcccct gatggaatcg ggaaagatac ttccaggggt tcggattata attgccaacc
                                                                     3660
cagaaacaaa aggaccgctg ggggactcac accttggaga gatttgggtt cacagtgccc
                                                                     3720
acaatgccag cggttatttc actatttacg gagacgaatc cctccagtca gatcacttca
                                                                     3780
actcaagact aagttttgga gacacccaga ccatctgggc acgcacaggc tacttggggt
                                                                     3840
tectgeggag aactgagete acagatgeaa atggagageg ecatgatgee etetaegtgg
                                                                     3900
taggggcact ggacgaagcc atggagctgc ggggcatgcg gtaccaccca atcgacattg
                                                                     3960
agacctcggt catcagagcc cataaaagcg ttacggaatg tgctgtgttt acctggacaa
                                                                     4020
atttgttggt ggttgtggtt gagctggatg ggtcggaaca agaagccttg gacctggttc
                                                                     4080
cettggtgac caacgtggte etggaggage actacetgat egteggagtg gtggtegtgg
                                                                     4140
tggacatcgg cgtcatcccc atcaactccc gtggggagaa gcagcgcatg cacctgcgag
                                                                     4200
acgggttttt ggcagaccag ctagacccca tctatgtggc ctacaacatg tagtctcgtc
                                                                     4260
tettggette catggaettt tetagagatg tagacattgt teteegtqte caetqaaqeq
                                                                     4320
tgcagacaca gggcaacact caccagaata cagccatttg tggtgagagt ggaggaggaa
                                                                     4380
gaggaggagg aagaggactt ctcacagcag ccacgattgg catgggggtg aaatgtgaat
                                                                     4440
ttaccactga atttcgctca gaaggacttt ggattactgc cttcagtttg ttggaaaagc
                                                                     4500
ccatttcaaa aactttcttt tcttttcttt ctttttaat tattggataa taagtgcttt
                                                                     4560
cttcgtaaat gtggtatttt gttaagccga aatagcaatt aaaaaaatat cctgcctcc
                                                                     4620
agatgggttc ttttaaacaa tttatgtagt gtgacaaaga attgttttct ctgttttaat
                                                                     4680
gtgtcatgaa atcttaatga catggatctg ttactaattt aagccattgc tagatctcat
                                                                     4740
ccttttagga aagtttgagg tacgagaaaa ccttccaaat agcaccttcc aattagataa
                                                                     4800
tagcagcttt ctttgtcaga aatgtgctga agaaacaaag gctggtatac ggccttcgaa
                                                                     4860
gttagtatag aaggagaaga aattataaat aaggtgtatt tcggcaatta tcttgcaaat
                                                                     4920
atctttgtac taaactaaaa agataaaata agttaacttc ctcaatatgt aattatgtac
                                                                     4980
aaaacgttta atttattttg atctctttag aactataaaa gagaaaaaca ttcaagaata
                                                                     5040
ttaaagtett gtaatgtttg ctaatataaa aaagtgttgt attatettge gtggatagta
                                                                     5100
tcacaacaaa tatatatata tgaaatataa attcactaat gaacaaagga gattttaaag
                                                                     5160
tttaagatgc agaacttgtc acttgcatgg tgtgccccc gtactcacat acactctgct
                                                                     5220
gttgccagca gtcgcagacc gcaggagccc tgtctaaaag tttcttctag aaccagagac
                                                                     5280
cagcaagtga aattattgcc atctcaagga tggcaaaaga attcaaagct caatgtgcac
                                                                     5340
tatttttttc tttgctgtgg gacaacagtg aatgtgttta tgccagcgtg tgctgatgat
                                                                     5400
actgaggggc tttaggttgg caaatagcac tgttttctta gctgcaagaa ttcattgcac
                                                                     5460
```

```
aatgtttttc atcatttttg ttaatgtcat ctttttttgg tccttgctac gaaaaggaat
                                                                     5520
gcgattctgt ggtcattcgc actgggttgc attgattccc cctctgatgg ccaatgtgga
                                                                     5580
gtggacaaag tgtccggaac tcacatcggt gatcgtcccc tcgtcttaag acccagcccg
                                                                     5640
                                                                     5700
ctctgtgtga gcctctgggg ctccctcgct cagtgagcac agttccccgg gggttcatgc
                                                                     5760
cagageteeg getgaageaa gaagteetee agetgegteg titgeegeet giggaegagt
                                                                     5820
gegeeceagt ttetgeeetg geageteetg gecaeacett eteagagete acetgtgeae
                                                                     5880
ttctaaattg aattggccca cggtgtccaa ccaagaagga gcatctgcac tccgagaaag
atgtgttctg taactgcccc agtgtgaccc cgcagtggct ctcggtgcta gatatgcatg
                                                                     5940
actaagattg atgctgggca aaatgtagat gatctttcat tatgttgtgg gcagcgtctt
                                                                     6000
tetetgeett tgetatatge agteageagt aageettttg etaaaagagt tttgtttgae
                                                                     6060
ttctgagatc caaggctgat tgttgttaaa aaaaaaa
                                                                     6097
```

```
<210> 5989
<211> 1708
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1420)...(1479)
<223> similar to gi35570 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5989 caccettttt atccaggtca ttgggttage tgacagggag ccaagattga aatctaagat 60 ctttgccctg caggattcag ggctaatgga catcctgaga tgggaggaag gagctttcat 120 tacageettg tgggtettga etcaccagte cetgeaggag ceagtggagt teetgeeatg 180 gtgtccctga ggaggtgtag cttctcacct acctgccgc caagcccctc agtctqqqtc 240 ttcttttccc atgcagcctc cagcccaggc tgcatactat ggctgtggcc cagtgacacc 300 cacccagect geocccaggt ggacatecca geoacctaga cetteetgtg agtgacecag 360 ccccttccac tctcagactg gcctattggt gtgggccccg tgaggcagtc ataacacagg 420 gatgaaacct ggctctgcca cttcccaagg tgggtgactt cacttctctg agcctcagtt 480 tectettetg ageatgggee tgaatgagae gtgtgtaaag taccaageae agtggtgage 540 caatggaaga cacgcagcta gccaccagca gtcatcacca aagatgcctc tgatttgtga 600 ctctgaaaat tcttgcaaag ctgagaaggt gaaattcctc tggctatatt gttgaccaaa 660 ggccctcctc tgtaagagtg aattgcacgc tcacttgaaa ctatcttgag ggactaaggt 720 gtacaatcct ggtgcttatg cagtttgggg ctctaggtag acacgagctg gctttgaaat 780 tgtagattcc tacactcccc ctttctggag ttctgggtct aagtgaattg actcctattt 840 ctgttgtgaa tgttgtagtt tcccttccca ttctcttggt ggccctggaa gcttctaggc 900 acagtgtgcc accetgatta tteccaecae tecatecaae ttttetetet etgtggtgte 960 tgcaccacaa gctgcctacc ctccaggtgc ctcaatggtc cggccaccaq ttqtqcctcq 1020 gegeeeeeg geeeacatea geagtgteag geaggeetee acceaggtge caegeaeggt 1080 gcctcatacc cagagagtag ccaacattgg tactcagacc acaggaccca gtggggtagg 1140 atgctgtaca ccaggccggc cgctcctgcc gtgcaaatgt tcctcagcag cacataqcac 1200 ctatcgggtc caggagccgg ctgtgcacat cccaggacag gagcccctga ccgcgtccat 1260 gctggctgcg gcgcccctgc atgagcaaaa gcagatgatt ggggagcgtc tctacccct 1320 tatccatgat gtccacaccc agctggctgg caagatcacg ggcatgctgc tggagattga 1380 caactcggag ctgttgctca tgctggagtc tccagaatcc ctccatgcca agatagacga 1440 ggcagtggcc gtgctgcagg cacaccaggc tatggagcag ccgaaggcgt acatgcactg 1500 aaaccagaaa aggaaatcct cgcttccatg gctgccaaaa ggacagtgtt tctggctctc 1560

```
agecetaagg ceetgeaaac tetaacttat tteeeaatta gtetgtatet ataettggge 1620 tetgtatgtg aatgaaggtt ggteaceeat ceagectatt acettttget ttgtgtatta 1680 aaagtgetge aaaatetgaa aaaaaaaa 1708
```

```
<210> 5990
<211> 740
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(508)
<223> similar to gi3025832 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5990 cctcaaagct ggtagctgcc ccatacttgg gggcagaacc cgcgtggccc gagcggggg 60 eggggetegg eccateteeg geceettegg etceatetag teeceteega etggeaaaga 120 gaagggattc ctcggcgccg ggcgcagctt aagagcgcag cgcagcaggc tccattcccg 180 geogeogeog eteageceat tacgeaaace tggcgggtee aaccaacece getetgeege 240 cgctgctgga acccaggagg cgtgcttgca ggcttcgggc actacgcggg gctggaaata 300 ccacgcactg ccccttcgcc tagacccccg ctcgggccac gcgggttctg ccctcaaagc 360 tggtagetge cecagaettg ggggtggggg gaggggaagg ggegaggetg gegeeeette 420 cegettttgg etecegegtt egttgeagea getgtegeea aatgaaacce cagaatgggg 480 acgtgcaaac cctccaccc caccccagc cacacacgtc gcggtcggag aactgagaag 540 ggggcgctgg gtccgaggtt ctggaaaagc aagaactcac ctgcaaacag gcagtccttc 600 tcagctctgg acttctggat cacgacgtcg atatccttct gaattcgctc ttgccttgaa 660 cacatcccca ttaaataaat ccttggaaaa gaagcagccg ctatttccac cccaccccc 720 tcgcacgcgc aaaaaaaaa 740

```
<210> 5991
<211> 1408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (742)...(50)
<223> similar to gi5901836 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5991
tcgattacgc caagcttggc acgaggggc taatgaagcc tagaccccag ctggattgga 60

```
agcaaaggcc tttccttcac tgggaaaggt gctgctgcta cccatctcat tattctaaga
                                                                   120
gtgattgaga atagaggggc tgaagggaaa cgaaagtagg agaatgttgg ccagagctag
                                                                   180
tagagaaaga acgtaatatt gagaaagcag acatcagtgc taggtgaggt gctttcttta
                                                                   240
aagagctgtg tgtatagact ggggaggagt ctgtctgggg acaggaatgc tgattccttt
                                                                   300
                                                                   360
ttttccctgg gcagaatcct aatgtacctg gctagctggt ggtgagtagg ggctttgggg
ccaacttggt gggctcccca aggaaacccc tttgaaacca atggatgcat tcacgggctc
                                                                   420
gggtctcaag aggaagtttg atgatgtgga tgtgggctca tcagtttcca actcagatga
                                                                   480
tgagatetee ageagtgata gtgetgaeag etgegaeage eteaateete etaceaetge
                                                                   540
cagcttcaca cccacatcca tcctgaagcg gcagaagcag ctgcggagga agaatgtacg
                                                                   600
ctttgaccag gtgactgtat actactttgc ccggcgccaa ggttttacca gtgtgcccag
                                                                   660
ccagggtggt agetetetgg geatggeeca gegecataae tetgtaegga getataeaet
                                                                   720
ctgtgagttt gcccaggaac aggaggtgaa ccatcgagag attctgcgtg agcacctgaa
                                                                   780
ggaagagaaa ctccatgcca agaaaatgaa gctgaccaag aatgggacag tggagtcggt
                                                                   840
ggaggctgat ggcctgacgc tggatgatgt gtcagatgaa gatattgatg tggaaaatgt
                                                                   900
ggaggtggat gattacttct teetgeagee tetgeecace aaaeggegae gggeeetget
                                                                   960
gagggcttct ggggtccacc gtattgatgc tgaagagaag caagaacttc gagccatccg
                                                                  1020
cctgtcacgg gaagaatgtg gttgtgactg ccgactgtat tgtgacccag aagcgtgtgc
                                                                  1080
etgeageeag getgggatta aatgeeaggt ggategeatg teettteeat gtggetgete
                                                                  1140
1200
teattacete cacaccatta tgaagetgga getggagage aageggeagg tgageegee
                                                                  1260
agcagececa gatgaggage ceteceegae tgecagttge ageetgacag gagcacaggg
                                                                  1320
ctctgagacc caggacttcc aggagttcat tgctgagaat gagacagcag tgatgcacct
                                                                  1380
gcagagtgca gaggaactgg agcggctc
                                                                  1408
```

```
<210> 5992
<211> 1818
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (748)...(1361)
<223> similar to gi498731 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5992
gtggaatcgg ctgtggggca cctggaatcg aggggccagg agtgattggc tgagccatta
                                                                       60
aatcatagtc atttccagat gatcctgcag caacatagga ataagagctt caagcagttc
                                                                      120
ccatcctgtt agtctgcgtg tgtggtagct gaactcaaga tgatgtgggg ctaagaaaaa
                                                                      180
taattgtcca tgtgcaaaga tgtgggcaag aatggcctct gcagattttc ctgaacttct
                                                                      240
gctaacttgc acggctttat cacagcattt ttaaagcttt ccctcaaaaa tcctgatctg
                                                                      300
catgatetea getaetttat tgacaaaaag geagtgaaca taaceteaet taattetggt
                                                                      360
gtagggtgta tgtgctaatc gttctaattc ttgattacct agtttataga taactgctgg
                                                                      420
tettaattge agagtacaga gaactgaace ageteetgat attgtagtta geagtettee
                                                                      480
tggcttetea etetgeetta tattteeatg tgggtttaet teteteataa etaettteaa
                                                                      540
ggtatttttc ttccaagctg aaataaaact ggggccacat attttcagtc atttcttccc
                                                                      600
tgttgaattg aagcaaatca gattttctgt ggggaccctc aaatgcaact gaagaaatag
                                                                      660
attgttgcat tcattcctcc ccaccccca tttgtaggca gtaaacaaag tatgactgac
                                                                      720
agattgaaca cctgcaaaac tgctagcgta atctcagcac atacgcagct aggaagtttg
                                                                      780
tcataaaatc aacttagaaa tgagatgagg ctgttcagtt tgtcttaaaa aaatcagatt
                                                                      840
```

```
aggtaaaagc tgtcctacca aagagtctag caaaacaata tagtattttt ttgcagaggc
                                                                      900
atgaaaaatt aagatgcttt agagtacttg aaagttgtgt agtcatttta tttgcaaaat
                                                                      960
gaggtgactg tggcaaatta tagaacacag agtattatta cttttgccag gtttttctga
                                                                     1020
cttgatttct gtaatttcca gaaacccaga cttctcattt ccacacctag agatggaaac
                                                                     1080
aggcaagtaa ctgacatgtc tatttccttg ggagcatgtg agaacatagc agtagggacc
                                                                     1140
aaaagtotca gcacacttac ctccgattat gccttaaaga gttgattgtg aagaaccagt
                                                                     1200
                                                                     1260
aactttgtcc caaatgcttc tttggctgtt tcatgcagga cttaattatt gcttttaaaa
                                                                     1320
attcacaatg aaaagacgat tctgctgtat ttgttaaacg ttgacatttg gttctagggc
                                                                     1380
cttgagtatg tgccacgtgc ttgtgaaatg ctatgattca catgtaacat ttaaacatta
atttaaaaag ggaaccttgg agaattcttt tgttcactag ttcctttttt ctctacattt
                                                                     1500
ttaatttatt aaacttgctg tgaaaacact ttgattttct aagaggaagg tactttaagt
tccagaatga acatgtagct gcactatgcc agaaattaat gagggaagac tttcttccta
                                                                     1560
agtgettatg ttttaactta tgttagtgaa accactacaa ggtgtttcag gegetgataa
                                                                     1620
                                                                     1680
catgetteac acctgeeett ggaggteaca gtactaattt actteaaatt tagttatgae
agtgtcactg tatcctagtt atgtttacag cacaaataaa taatgactgt catacatcca
                                                                     1740
                                                                     1800
gaggagaccg aacctgccca gctgatgtac tgttttatgg aataaagtca cttgatcaga
                                                                     1818
aggaattgaa aaaaaaaa
```

```
<210> 5993
<211> 1087
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1088)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (339)...(686)
<223> similar to gi5105617 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5993
                                                                      60
tttccggagc ccgcccctc cggggagnag gaggagggc ggcgggggaa gggagggcgg
                                                                     120
gtggagggt cgggaggaac gggggggggg aaagatccgc cgggaccacc ggcacggccg
                                                                     180
gaegegegee geegggttga atceteeggg eggaetgege ggaeeeeaee egtttacete
ttaacggttt cacgccctct tgaactctct cttcaaagtt cttttcaact ttcccttacg
                                                                     240
                                                                     300
gtacttgttg actatcggtc tcgtgccggt atttagcctt agatggagtt taccacccgc
                                                                     360
tttgggetge atteccaage aaccegacte egggaagace egggeeegge gegeegggg
ccgctaccgg cctcacaccg tccacgggct gggcctcgat cagaaggact tgggccccc
                                                                     420
                                                                     480
acgagegee ceggggageg ggtetteegt acgecacatg tecegegeee cgeegegggg
                                                                     540
eggggatteg gegetggget ettecetgtt cactegeegt taetgaggga atcetggtta
                                                                     600
gtttcttttc ctccgctgac taatatgctt aaattcagcg ggtcgccacg tctgctcgtg
                                                                     660
cegaattegg caegaactgt gatgeeetta gatgteeggg getgeacgeg egetacaetg
actggctcag cgtgtgccta ccctacgccg gcaggcgcgg gtaacccgtt gaaccccatt
                                                                     720
                                                                     780
cgtgatgggg atcggggatt gcaattattc cccatgaacg aggaattccc agtaagtgcg
                                                                     840
ggtcataagc ttgcgttgat taagtccctg ccctttgtac acaccgcccg tcgctactac
egattggatg gtttagtgag geecteggat eggeecegee ggggteggee caeggeeetg
                                                                     900
```

```
geggageget gagaagaegg tegaacttga etatetagag gaagtaaaag tegtaacaag 960 gttteegtag gtgaacetge ggaaggatea ttaaegggag actgtggagg ageggeggeg 1020 tggetegete teecegtett gtgtgtgtee tegeegggag gegegtgegt eeegggteee 1080 gtegeet
```

```
<210> 5994
<211> 1113
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1114)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1043)...(316)
<223> similar to gi510905 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5994 ttttttttt ttagaagcag aggctcaggc tgagcccagg tttattatcc aaaatcaaaa 60 tgaaatgcag tgattaaagg acacaaggcc tcagtgtgca tcattctcat tgtggctttc 120 180 tgggcaagtc ttaagcaagc catteetget ttetgggeet ggeteecatg ggecattaga 240 aatgaaaatg ctttgtggac tgctgaggac ggtgcaaggg gtgaggtttc cccagctcac 300 ceggatecat gggeceagea eccaggggea teagettetg ettttatggg tgggggtetg 360 caggtgggaa gtcgtccttg ggccttcaaa atgacctcat gggccctccc tggaaggagg 420 tectececa etggetgeet ceaegegetg eegecatgtg gecagettgg ggteggeett 480 tegaagaett ggeageeage acceaeggga tgeateaget eegtaatgge taegaggtea 540 gctaaggaga tgtgaggccc agtaaggaag gccttgttct ggaggaactt gtcctcgagc 600 aactgcaggg tcacatccaa ctctgccagg gtgggctgcc agtgtctggg gagatactgg 660 ctcacccagg aaaacaggga accatcacct tatgcccaca aggcccggag gcagcttctc 720 cgcagagtcg tgtgctgcca tgccaggtac tcatccacac gggcacgggc ctgcaggtcc 780 tgagggtacc agtagtcagg gaccttatat ttgcgcgtca ggtagagcag gatggccaca 840 ctctccgtca aggtgaagtc cccgtccttc aaggctggca ccttcttgag ggggttcacc 900 tgggcaaagg catcgcttaa gtgctgacct ttaatcagat ccacgatgcg cagctcgaag 960 ggaatgtcgt tettettgge aaagatgtaa acagegegge agggetggga cageaggtee 1020 aggtacaget ceaggeecat agtggggace gacegacaaa tteenegnen etggeetaag 1080 gtctcgatgg nnntccattn nnnccggggg gcg 1113

```
<210> 5995
<211> 876
<212> DNA
<213> Homo sapiens
```

```
<222> (329) . . . (797)
     <223> similar to gi1399086 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5995
                                                                       60
agtetgegag gaggaagteg cetetgtgee eeggagttea gaggtetaag aeggegeete
                                                                      120
cctctgtcgc caaagttgga gtgcagtggc gcggtctcgg ctcactgcaa gctccgcctc
ceggatteaa gtgatteece tgeettagee teetaagtag etgggattge aggtgeecae
                                                                      180
caccacaccc ggctaatatt ttgtatttta atagagactg ggtttcaccg tgttgaccgg
                                                                      240
gatggacteg atetectgae etegtgatet geetgeetaa geeteeegaa gtgetgggat
                                                                      300
tgcaggcgtg agccaccaca cctagctgat ggtgccaaga acgaagaagg aagctcctgc
                                                                      360
ccctcctaaa gccgaagcca aagcgaaggc tttgcaaggc caagaaggca gtgttgaaag
                                                                      420
atgtccacag ccacaaaaa aacaagatcc acatgtcacc caccttccgg cggcccaaga
                                                                      480
cactgtgact ccggaggcag cccaaatatc cttggaagag cacccccagg agaaataagc
                                                                      540
ttgaccacca tgttatcatc aagtttccgc tgaccactga gtaggctgtg aagaagatag
                                                                      600
aaaacaacag cctacttgtg ttcactgtgg atgttaaagc caacaagcac cagatcaaac
                                                                      660
aggetgtgaa gaagtttgtg acattgatgt ggecaaagte aacaetetga tteaqtetga
                                                                      720
tggagagagg aaggcatatg ttcgactgqc tcctgactac qatqctttqq ttqttqccac
                                                                      780
caaaattggg atcacctaaa ctgagtcaag ctggctagtt ccaaatatat gtatatcttt
                                                                      840
tcaccattaa aagaatctta atctctcaaa aaaaaa
                                                                      876
     <210> 5996
     <211> 3270
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3107)...(1381)
     <223> similar to gi187242 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5996
tttttttttt ttggttcatt ggaaaaggat tttatttcac cataaaaatg caaactggaa
                                                                       60
taaacaccat ctttcctaac gcgaacgtta cagctatttt taggtatttc tgagcttcac
                                                                      120
ttggagaagc aaacgattat aaaacaagtt tgcagcctga aatctgtttg aaacattcca
                                                                      180
agtaaaaata atttagcaaa acagcttett aaaaaaaeca cacacactaa cetttactaq
                                                                      240
aaaccaaagc ttttaaccaa tcttttttat gcttaattcc ttgacgttgt aaaaagtgaa
                                                                      300
tgtttttgaa ggagcatcag accattttgt accactcccc acataccqac accttaqaaa
                                                                      360
gaacggcccg tttgagtttt gatcttaaag gacttgtacc ttcctcatcc gtgactcaat
                                                                      420
gtcagcacga cgattcggca tcccacccaa actgcacttc ctgatcagtt aacattacaa
                                                                      480
acggggggga aagaatcacc agggcaacgc tttcttttca gtgccaqtqt qactatqqtq
                                                                      540
gcccgtgcac ctcctaggcc gtgcacgcag ggaggtcgcc aagcagacac aqaaatcccc
                                                                      600
atgtggggga atgcagcagc tctgccatcc tcacgactgt cggtctgtgc aattttcctg
                                                                      660
```

<220>

<221> misc feature

```
720
actgagagag gaccggccgc attaaagcta tcggatcaag ttttaaaagga ctacgtgttt
                                                                      780
gaaactgaag tgccaagtac gctgcggtga gtggagaaag atggatctct aaagcatggt
gtetteette etgeeggegg geteegtgga cattegtgge tgeagaaggg tettggettt
                                                                      840
                                                                      900
gcaggggtgg acggagagcg gccaaggagc ggccaggagg ctcgagcagg tcctggtctt
tcccggacag gccgtgggga ggccgtgccc gtcattacct gttccaggta ctgcggtgcc
                                                                      960
tgctcgggga ccgggagcgc gaccgctcgc ttcggcggcg gtggcggctg tgcttcctgc
                                                                     1020
                                                                     1080
tggcgctgcc cctccgctcc cggctccgct ccctccggtg cctgtctttg ctgtgggacc
                                                                     1140
teegggaceg ggtgtggtee gggetegtge tgegeeggeg ggggetgtea teettgtagg
                                                                    1200
cgtgcttctt gtggggccgc cgctccttgc gtgacttcct gtcctccctt gctgactggc
                                                                     1260
ccgccctggc ccgggcttcc tctccccgct tgtcccggtt cagcaagccc cgttctccgg
                                                                    1320
tgqcccggcc ccgcgccctt gctgggctcc cggttgcact tgtcctgttc tgaccggttg
tcctttctgg agacattctg ctcgcaggca gggatgccct tgggctgttg gttgttgtca
                                                                     1380
ggaatgcagg agaggacgcc gcccgggcac ctcttctctg gagagccatc ctcggggacc
                                                                     1440
                                                                     1500
acacgacagg agetetgaac eteettgeat ggggeeteet eggeeaeget eeegtteaeg
cttttgggag cgccgtcggc ctctgggtgg gccgggctct ccttgggggc accggccggg
                                                                     1560
ggctggcccc cgagggggtg cagcgtggtg gcgctcacac agccggacga cacggtctgc
                                                                     1620
                                                                     1680
aggatgteca ggacgggetg cagcaggteg gegtgtgeca egeceagete gtegtgtgtg
tggctgtcgt ccggcttctt gctcagcagg atgctcagca gccgctcgcg cagctcccgc
                                                                     1740
                                                                     1800
tettteeget geaggeeeag egegetee tteteeteet cetegeteeg eageteggee
                                                                     1860
tectgeagee geogeogete etectgetge tggageetea getteteete ettetgetee
                                                                     1920
tgttcccgta gcttcacagc catgaggtaa ggactgggct gccacatgtc tcaagcctct
                                                                     1980
tgtcatgctc ccttccgggg gacttatcac aacttggctc tgctgagcag ctcggcgatg
ageoggatgg actgeaggtt cetetgggee ageageaget tgegeteete cagettgate
                                                                     2040
                                                                     2100
tteteetgea getgettetg eteeteegee tgeagettet ceagettett etgatteegg
                                                                     2160
cgcagetcac ggtecetetg ettetgetce etettgegaa gettetette tetttteete
tetegeteca getettecag etectttigt tieettteet eegetegetg ceteteetee
                                                                     2220
                                                                     2280
getteettet etetgegett ttgttettet etttgetget ceagtteetg aagettetge
                                                                     2340
ctctccagct gccgcttctt aattgaggca tcactcaggt gtttggtcga atcaaaagaa
                                                                     2400
accttgatgt tgcaggccac ggccttgccg tcctcgccct tgtacatgag tttcatcccg
                                                                     2460
egeagggege teatggeetg gatgaageee atgtacteae ggtactgeae ataggeeteg
aagttcaagt gcccccgaa actgaaggtg tggaagttgc ggcccgtcat ctcctcccgg
                                                                     2520
taggggtcca gcatggggat gtccacattc cggatctccc cgaacttctc aaacaccttg
                                                                     2580
                                                                     2640
accaggacgt cetegetggg etteteggag eccgaeteet teagggegaa ecaettgeag
                                                                     2700
ggcagcccct ccaggtggat ggtgtccggc cgctcccccg gcagggtctc gttcatgtcc
                                                                     2760
ttggcgtcgc ggaagaagga gtcccagtcg tggcgggtgg ggaagtcgat cttgaactcg
geogegegea cetteaggat gteggagaag cegetgaget tgatggtett geegteeagg
                                                                     2820
                                                                     2880
caggccagaa aagacttgac caggctcttg ttctccacct ccccctcgaa gcggatgaag
tecatggtge tettggaaat acgeagegtg gagaactggt ggttetgeac catgecette
                                                                     2940
                                                                     3000
agecteteca teacetecca gttggagatg gaetteeeeg getgetteag etgegggagt
gccacgctga tggtcatctt ggtgatgggc ttcaggtaca agccgtaagc agggcagagc
                                                                     3060
tccacggcct cagacgtgtc gtgcacgatg gtagccgctg ccatagcctc cgggaccttg
                                                                     3120
ggcctgcgcg gggctccgcc tgcgtcccag gccgccgccg ccgctggccc aagctcccgc
                                                                     3180
                                                                     3240
cgtccctcga cgatccccgg acaggcgcgg cctcaccgcc gggagccgcc accgtccccc
ggaggcgcct ccgacgccgc caccgccgtc
                                                                     3270
```

```
<210> 5997
<211> 2599
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2398)...(756)
```

<400> 5997 60 ttttttttt ttaaagaagg aagaggtttt ttattcggcc gggagcatca gcagactcgc gtottgagag cogagotoco ogaaaaagaa attootagoo otttgaaggg ottacaacto 120 taaggggtct acgtgaaaga gtcataatag atcaagtaag tgtgaggaat gtgactgtgg 180 gctacctaca tcagctaaca gtacaaaaag ttttacagtg ctttctcata caatgtctgg 240 aatttacaga taacaccagt agttttggtc aggggttaat attattatca ttctaaccac 300 cagggccagg tggtggcgcc aaggtcgtct agctatttat ctttcttctg tttctttcca 360 420 actttttgct ttctcccttt tctcctgtct tataaactag ggaaaagggg aggttgggga qaaactqaqa aqqacaacaq qaqaaqtqqt qqtctcattc cctatttccc ccctttqaqa 480 attiticacti titagiggga gitticacti teatecteae tittigagie tettigegag 540 atagagcgat agtgattcat ataattcacg tgtgctgaag ttttctgatg aaccaaagta 600 gcaacaatac cttttatcat ttgaaaaagc aagggtaata cacaggggag cagcaagcaa 660 gttcttatta ctagcaatac acctacaatg agggttttaa atcctcctat agctggaaac 720 cattttccaa ataaagactc aggatcaaac ttgtgccaaa cctgtatagg cacatgtgcc 780 aactttgtca tgtccctgac tatgttttta accacctgtc cttgatcatt tatttgtagg 840 900 cagcaattgg ttaagttaaa ttttctacaa actcctcctt cagctactag caagtagtct aaggecagte tattetgata gatageatte etcatttggg tttettgeca agetaaaaca 960 gtcaaagete tgccagttte attagaaatt atttctaaga tggcctgcaa ccgtatgate 1020 caattgagca tgtagatggg ttcggtatcc ccatgagcca tcttgtgccc atgtggcagg 1080 cccataatac tgaatgatcc tttcacgggg ccactcatta tctttccagt ttcctataac 1140 tatgcctttc ttttctcggg aggcgtagac agagaaacct agcagctcac ccatttttat 1200 gggtaataaq aaaaaggatq gcttaatagt qccaataaca caactqtctq cccatttatt 1260 aggtaaccga aagtaggctc tgtgcctaca tatctagtat agtccagagg gaactgtcca 1320 gtcctaatga gattctgcat gagcctaagc agtttttaat ttagaaaatt tactaaatgg 1380 attettttea gtgtggttta ggteetaeta agtaattgte tttgttgtge tgttataeaa 1440 cttctgtcct atacaattag gctttcctac agggatgata aagtctttcc cttctctagc 1500 tatacagtat tgtctaataa ttgaggtttt taggacctag aagttgctag cttcggcctt 1560 ctaaattgga attatatcag gagctggatc agtaggcacc aactctcagg cttcccaagg 1620 ccatctgtct ccgatagtgg ttcctccgcg tacataacaa gaagtaccat taagtaagaa 1680 aattacattt totgotaatt ggagaaacaa attttttgto tttttcagaa gttotggtgo 1740 tggcagattc agctcctcat aaaaggtttg aaatactggt ttgggagagc acttgtggac 1800 ctccccttta attaaaatga caacttgagg ttttaaccct gtcctattga tccccaqqgt 1860 tacacgttct ccctttttcc aatggggatc taggggattg gtaattatta gttctagtgg 1920 gttacagtga ccggcagcac aggaggggtt ggcttctccc ttctgaagat aaaccgagtc 1980 atttttgttc tttttttaag tagcctaaat aacacatqqc caataqqcac aatttttaca 2040 aacccctgac tcatgacaaa catatttatt ttctactctt tagctccttt ctcagttaag 2100 agaaccacat cctatttcta gctttttact attaatggct gcacaagcat caaatcttaa 2160 agttatttgc ttggggattt ctttttcttc tgttctagtt attattttac ttgtatcacc 2220 tagcaaaagg ccagttctta tttcaaaaac ggtggttgca gcgggctcag atgggttata 2280 acacgcatca ggtcggtcat ttctcgggct acataccttg tactgagtgg cattatacaa 2340 acaagtttcc ttttaatgtt tccatacatt tcataataac tatagaacag aaagattggt 2400 tttaaattgc cggtcctact tcgggggacc tggataaata cactggggaa cagtccccaq 2460 tttgagtaag atcagttgaa gcccttactg tataagtcca aaatttaaga aaaatgaatc 2520 tcatgatgag cttcttcagg cttcggcgtg cgtggaccag tcagcttccg ggtgtgactg 2580 gagcagggct tgtcgtctt 2599

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (176)...(552)
     <223> similar to gi5912179 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5998
ggtggtgctg ctgctatgag ctgcaccatc gagaagatcc tgacagacgc caagacgctg
                                                                       60
ctggagaggc tacgggagca cgatgcggcc gccgagtcgc tggtggatca gtcggcggcg
                                                                      120
ctgcaccggc gggtagcagc tatgcgggag gcggggacag cgcttccgga ccagtatcaa
                                                                      180
gaggatgcat ccgatatgaa ggacatgtcc aaatacaaac ctcacattct gctgtcccaa
                                                                      240
                                                                      300
gagaacacac agattagaga cttgcaacag gaaaacagag agctatggat ttccttggag
gaacaccagg atgctttgga acttatcatg agcaaatatc ggaaacagat gttacagtta
                                                                      360
atggttgcta aaaaagcggt ggatgctgaa ccagtcctga aagctcacca gtctcactct
                                                                      420
gcagaaattg agagtcagat tgacagaatc tgtgaaatgg gagaagtgat gaggaaagca
                                                                      480
gttcaggtgg atgatgacca gttttgtaaq attcaggaaa aattagccca attagagctt
                                                                      540
gaaaataagg aacttcgaga attattgtcc atcagcagtg agtctcttca agccagaaag
                                                                      600
gaaaactcaa tggacactgc ttcccaagcc atcaaataac tgaactctga atgatggctg
                                                                      660
gagattgtct atcaaggaag gaagttactg tcttcccatt caagtactgt ccattaagtg
                                                                      720
tcttgcctca gatttgattt aatcttaatt aaaggtatca ggtggca
                                                                      767
     <210> 5999
     <211> 495
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (408)...(46)
     <223> similar to gi2367264 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5999
catatgacca tcgattcgag gtccggtgcg ttacattgca tcgactggaa tgacactgcc
                                                                       60
ctgtccccac ccaacttact tgccttgcac cacatttcgc acttcgctca tggcactgat
                                                                      120
aagccgtggg tcgtagtcat tttccagcac ccattgcagt acgtcagtgt cgaggtaatt
                                                                      180
ccactggtta cgcggtgcca caaacgcccc gcgataacgt ttcatttcaa tcagccqctt
                                                                      240
cgccatcagc gaacggaaca cctcacggat gatgttgcgc gaggttgcaa actcctcaca
                                                                      300
gagttccgcc tcagccggaa gcggcgagcc tggcacgtat ttqccqtqac caqatctqtt
                                                                      360
tacccagggt aatggcaatg cgttcggttt tattgagagt catggagagt ccttgtgctc
                                                                      420
ggtatgttct tctctacttt cccccgatcg atgcataacg cggcatcttt gtagtgccag
                                                                      480
cgtgatcacg ttcgc
                                                                      495
```

<211> 767 <212> DNA

```
<210> 6000
<211> 1059
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1006)...(373)
<223> similar to gil491702 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6000 60 gtttccttat ttgttaatgt ttttcttttt ttaaatcgct ccttgtggag cagtgctaac tcttaggcag tgcagctgag ctgtcaacaa ctactgttat acagagaaca taagaatggg 120 taattagagg aggtaggata ttgttggtgc agctatatta tttaaaaattg gtggaagtcc 180 240 aggecgagea cegeggetea caegtgtgat ceteaagaat etaacacaeg aggagegtga ccagtttcta aggggaactg tgcacacaga cccagagggc accttactaa actcaggagc 300 aacagagtga gcatgtgtct cctctgacct ggctaggaga cagatccagg catagaccct 360 420 ctgggctgct gtgggttcag ccactggagg aggagatgga tccaggcata gacctgccag 480 gctgctgatg ggttcagcca ccgggggaga cggacccagg catagacccg ccaggctgct gtgggttcag ccactggaga aggagatgga tccagtcata gacctgccag gctgctgatg 540 ggttcagcca ctgggggaga tggatccagg catagacccg ccaagctgct gtgggttcag 600 660 ccactggagg agacggatcc gggcatagac ccgccaggct gctgtgggtt cagccactgg 720 aggagacgga teegggeata gaceegeeag getgetgggg gtteageeae tgggggagae 780 ggateeggge atagaceege eaggetgetg tgggtteage caetggggga gaeggateeg ggcgtagacc cgccaggctg ctgtgggttc agccactggg ggagacggat cggggcatag 840 accegecagg ctgatgtggg ttcagecact ggaggagacg gateegggea tagaceegee 900 aggetgetgt gggtteatee aetggaggag aeggateegg geatagaeee geeaggetge 960 tgtgggttca gccactggag gagacggatc cgggcataga cccaccaggc tgctgggggt 1020 1059 tcagccactg ggggagacgg atccaggcat agtcccttt

```
<210> 6001
<211> 2055
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1440)...(838)
<223> similar to gi3875538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6001

```
ttttttttta tattgtaaac aaatttaatg accaaatgat agactggtaa aaaatgtgcc
                                                                     60
tateaceaag ggetgataee ttteetgtgg eecaggeeet etgetettta aaaatgggge
                                                                    120
acaaatacag gcaggtaaga gacagacagc teteateetg caetettgge tttetgagag
                                                                    180
gtatgacccc aaggtcctgg agtctagctg ctgcttcctc ctctgggaaa tagaggagtg
                                                                    240
atattggtag tacctagggc atagcactgc tgggacaatt cagtgatttg gggactgatc
                                                                    300
tecatateaa gatgaeetga teetgtetgt gtgegggaea gtggetagea eggageeett
                                                                    360
gttaggcccg cctaccatct gaccettete aaacettece gtetgaggae atetgeatge
                                                                    420
acacttgtcc ctccaatgct gtctcactct ggatggccct gacacctgag aggccagaca
                                                                    480
gccaagtggt ttctaggacc tttgtgattc taggcctggg ttcctgtttc atttctgcct
                                                                    540
ctgatggccg agtggccttg aggaagcaac atctttccag gcctcctttg acccacttca
                                                                    600
ctagttcatg gggccatctg aggatccaac ccggtgtcag gcacttcgct cgggcctgac
                                                                    660
agaggacaga agegeteegt ageagagget ttegttettt aatagteget etgageatet
                                                                    720
tgtctgcctc catccagctc tcactttccc tgtctggctc taattctggt tgacccagag
                                                                    780
ggcatagctg aggctcggag gtcaggaacc gtggactcca ggaggcagtt ttgagggtcc
                                                                    840
ttcaggcttg gccacggcag gataccacca ttccatctca gaggcatgag gagtccctag
                                                                    900
geceegactt ggtgaccett gecetgtgtg ceceeteaac agtggecagg cecteetgtg
                                                                    960
tgtgtctgct gggggagcag gagccgggtg tggggggcatg ggaaggcggg acgcctgggt
                                                                   1020
teccaeagge eeggtggetg agteaceagg eggeeatetg geteceatta geceagggeg
                                                                   1080
gcagggggct ccatggggcg ggccctgcgg ccagctgggg gcagggacgc tggggcaggc
                                                                   1140
tgtgtgtggg atgactcagg acccatgata acagcctgtg cgcatttggg gagtgtaaac
                                                                   1200
aggagaggga gaggaaggcg gaggaaggga aaattgtggt tgggcagagg ggggctggtg
                                                                   1260
gggctgagaa gggtagagtc ccccctccct ctacactcaa gctggcaggc cccgtgatcc
                                                                   1320
acageetggg teetggggag agaagagage tgeececate etecetgeet ggggteteet
                                                                   1380
ccctccctg gggctgtatt actcagtggt cagggttctg ctgcctatag cagccaggtt
                                                                   1440
tgagggaagg gggaagaagg ggcccagagc ctggagtggg ggatcaaaac ccaqaqataa
                                                                   1500
aggctgagag acagacagag agggacagtg agagcagagg cctagagagg tggaaatgta
                                                                   1560
caagtagaaa gaagaggccc agagtgaggc agaaggagag atgggaacct aacagaagca
                                                                   1620
aggaggetet gagtgtgaga cacagegeag acataaacag agagggggag acagacagea
                                                                   1680
egggaggeag etgegetggg geetaggggt eageacegga accaaactgg ceaettecag
                                                                   1740
ccacgaaagg ccccgccagc tggcctccgg caaggggagg actttcacct tgggccctgc
                                                                   1800
1860
gcactggaaa gagggagcgg gggtagggag agagacagaa agacagaaag agacagaaag
                                                                   1920
aagcccagac agacaccaag aaagacagag gcaggagaca gggtgggaga gatgagaaag
                                                                   1980
ggaaccccag aaacagtggg ggtgggggtt gtctgagatg agactagacc cagtgagatg
                                                                   2040
gggggttggg gtggg
                                                                   2055
```

```
<210> 6002
<211> 6655
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4793)...(988)
<223> similar to gi189036 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6002
ataaccattt attagtcgaa agtgttttta agcacagtca gggtgtaaac agtgcagcat
tcctgctccc ctccgtggga gcagcgtctc cttttcaatt catgtgacta cagaaggcac 120
```

```
ttggtgaact gtgcgtgtct gaggtgtgga aaccaggaga cgctgctccc acagtcaggg
                                                                     180
                                                                     240
tgtaaacagt gcagcattcc tgctcccctc cgtgggagca gcgtctcctt ttcaattcat
                                                                     300
gtgactacag aaggcacttg gtgaactgtg cgtgtctgag gtgtggaaac caggagaggg
                                                                     360
ggaaagaatt ctcaaaggcc tgacgtgaga agttggaaag gtttgcaggt tagggaatga
                                                                     420
attgggagtg ggggccggcg gcacccattt cggtgacttt ctccccattt catgtaaaca
                                                                     480
gaattgccag ggaccggtta ccgtggatat gtttttctaa aaactcagtg tctgcacaat
ccattgatag aactggagga tgtgtctgtg tttcctgttg ggtttttctc atctcttaca
                                                                     540
                                                                     600
tcatacaaac ttcaattttt accttgaata caggggtagt aggggtggtg gtggtggtgg
                                                                     660
tggttgagac agggtctctg ttgcccaggc tggagtgcaa tgatgcaatt atagctcatt
gcagcetega agteetggge tggagegtte tteetggete ageeteeeta gtagetggga
                                                                     720
ccacaggtgt gtaccaccac gcccagctta tttttaaatt cttgtataga tgaggtttta
                                                                     780
ctacgttgcc caggctggag ggtggtggtt tttatattcc ttgtgtgagg ggtgtctgtg
                                                                     840
                                                                     900
atatttggaa tttgagaatg gatttagaca atgctaagta cagtctgctg ggttttgctt
960
gtggtgcaaa actgtagaaa gttgcttatt cactggcctt ggttccattg aagtctgcgt
                                                                    1020
ctcgagtgtc cgtttcctcc tcagaaccat ctgcattttc aataactcta cgtcctccag
                                                                    1080
accttctaga aggaacgaaa gaggtctcgt ttcctcgcct gagcttgctc ttgagtgcgt
                                                                    1140
teacetegeg geceatggee tegttgetet cegtggeete atecagetee egetgeaget
                                                                    1200
tectgeggtt ggegttgatg egetgggaet ceteetetge etecteeage tgeetettga
                                                                    1260
getgettgac cetggcattg cetttetetg cetgeteett gtactgeteg gecatettge
                                                                    1320
getegteete caeetgeage aagattteet teagettett gtetttetge tteagegaet
                                                                    1380
tggtggccgc ctgtttctct ctggcctcct gctcgacctg ctcctctagc tgtgcaatct
                                                                    1440
tggcctccag cgccgcgatg gtggatttga acttggactt gacggccccc tccatctcgt
                                                                    1500
ggagettget eeggagetee ttgttetgee getegagetg etgeegggea eteteattet
                                                                    1560
tetgggeegt getgegetet gtggeeaget egttgetgag etgeteggee tgetgtgtgg
                                                                    1620
etttgeggae eeggtegete atggeeteea tgttgeeetg eteeteetee ageteeteet
                                                                    1680
ccagctgggc gatccgggcc tccaggcggc gcttctcgtc ctggagtgcg ttccttcccg
                                                                    1740
acaggetact ggcccagete etetgccagt tecteettet tegaggteeg etttgtttge
                                                                    1800
gaccetette ageggeggeg aggteettet tgtagetgea tgaggtegtg ettecaaget
                                                                    1860
cttggctttc ttctcattct ctttgggctg tggcaaaaga tctcatctct ggaggcacgg
                                                                    1920
ggcatcttcc agctctcttt gaaagtcctt catctgagcc tgcagtttgc gtagctgctt
                                                                    1980
gatggctttc cctccctcc ctttgatggc agagtcggcc taaagatcca aggttcttac
                                                                    2040
agggtcccat cccagcttta tttttgctgc agctgccagg gcacgttgct ttcgctcgtc
                                                                    2100
ttccagttcc gtctcatact cgtgaagctg tctctgcaga tgccctcctg ctcgtcctca
                                                                    2160
ttctgctcgg ttcgggcttg gagataccct ttcgaaactg gcccttgaag gcgcctgcat
                                                                    2220
gttgacttcc agccgcagtt tgggcgtccc tccgtgggct tgcaagctcg gtccttccaa
                                                                    2280
getettecaa etggegtett cateteetee aatetggggt eteceaggge eeggettgga
                                                                    2340
cttctcccag atcatgggac agttcttgcc caacgtcaat ccttggaagc tgacccaggt
                                                                    2400
cttcccattt ctggctttga gcattttgtt ggtccgctcg agttcctctt tggcttccaa
                                                                    2460
ggcctcttca agggcccgag cccagggaca gggccttggt ttccttctcc ctggcttctg
                                                                    2520
cctcaactct gtccctctca tccgcgtatt tggaagagat gtttttctcc tcggctaaca
                                                                    2580
actgatcaaa tttcctctgc ttcttttcca ggttggacac cagttgccqc tqqttqtcca
                                                                    2640
aatcaacaac caggtcgtcc agctcctgct gaagcctgtt cttggtcttt tccagtttat
                                                                    2700
catacgegge egecttetee tegtactget gggtgaggtt etegatetee ttetggaace
                                                                    2760
tettetteec etetteeaga getteeaegg tgetggeaaa gteetgeage ttettetteg
                                                                    2820
agtcggagag ctggatgttg agagtggaga tgtggcgctc caggttctgc ttggcctcca
                                                                    2880
                                                                    2940
tetectegte cagetggtet tgeaggetgt teegeteete etceagetag gegeagegta
cgtagacacg ttgagcttct gccgggattc ttcttgaagc agctcctggg tgtcctggta
                                                                    3000
gctgggaact gagggacgcc acgtccttgg ccagcttaat ggccttcccc tcggcctcgt
                                                                    3060
taagcatccc ctgtgacgct ctcaacttca ttctgcaggc ttgtggactt tgtcattgag
                                                                    3120
ctccgcccgg gcccgctccc catcgctgca cttggactgc agctcctgca cctgcgcctg
                                                                    3180
cagettette attetatgtt ceaceteetg ettgggeetg geecaggace egeageteee
                                                                    3240
eggecagggt etgtgttete tttetecage gtetgettat tettgtetag gttegeettg
                                                                    3300
gccctctttt gactgctcaa gctgctctgt gaggctctgc accgcctgtg cgtgtttctg
                                                                    3360
ceteatetee tggacetgag ceteatggga eegegtetet teatteaggg eecetettea
                                                                    3420
gcaccgtcac ctcctgctcc ctcttggccc tgagctcctg ctgagtggct gtgctgtcca
                                                                    3480
gtgtgtcttc cagctctgtc tttagggcct ccagctcctc gccgaggtct cgcttctgct
                                                                    3540
```

```
3600
tttcagcctt gttcctggcg gcccgctctg agtccaggtc ctcctggagg tctgagatgt
                                                                    3660
ggccctccag ctcccggatc ttcttcaggg cattgttctt ctgagcgatt tcatcgtcaa
                                                                    3720
geotggecag ggeogectge agetectect cettettgge cagetgeate ttgagetetg
                                                                    3780
cgatctgcgc ctggaggtca gcgatctgct cgtggaagtc gctggcatca ccctccagct
                                                                    3840
3900
gttctgaaat catagattca tgcttgtttt tcagcttggt aagattcttg gccttttctt
                                                                    3960
cctcttctgc aagatttgtc gttaagtcac taatcctctc ctcaaggagt tttcgttctt
ttgatagttt attgttctga tcatccatga ccaggatctc atcctccagt ttcttgatct
                                                                    4020
tggcctcagc cgtgaccttc tcaagttgca gcttctgcct ggcagcttcc tcctccta
                                                                    4080
                                                                    4140
getgttette aaggteeage atetgetggg ceatettett cettteagee tgtagetget
ggcccctgtc ttcctcctcc tccaggcggg cctccatctc atgcagtatc tcctccagct
                                                                    4200
cetgettett ggeegeeage egeaceegea teteeteage etetgeatae agetetgtet
                                                                    4260
etgeetgeag etgtteetgt ageaggttet teteeteggt eagetgegag tgettetgtt
                                                                    4320
ccageteett aageteatte tetgeettet getgeegete ettggtette tgeagtteat
                                                                    4380
cctccttggc ctgcatctcc tactcctgcc gtgtcacctg cagcagtggc tacactttgg
                                                                    4440
                                                                    4500
tgaaaagcct gcaccactgc cagttccgca gcttgatgta tgcggcgcag ttcctctgaa
teacetteat ggeggteage tgetgetgee tettggeaaa ageetttetg geeaagtage
                                                                    4560
cacgacacat cgcctggaag gccatgatga catcggtgat cttcaaatct cgctcctcct
                                                                    4620
ctaggtgggc caggacgcca gttcggaaga agattttgct ctgccctatc ctgtataagt
                                                                    4680
tggggtcaag ttccagggct ttgatcatga gaatgcaggc ctgcttcccg tccatgaagc
                                                                    4740
ctttggggat ggcattcgcc gccaggatct cgtaccgttg gcggaactcc tggaagacga
                                                                    4800
teeggttggg gaageeetge eggeagatge gaatgeette eageaceeea ttgeacegea
                                                                    4860
                                                                    4920
getgetecag caccaggaac geatecaget tgeeggacet ettetegtgg ttggggatga
                                                                    4980
tgcagcgcac gaagttgggc gtggtgttgc gtagcgtggt catcagcttg cccagctgct
cettgtacag etgececaet gtgeggaaca tgecettett ggtettggag gegetgggea
                                                                    5040
gegagetete egteatettg gecatetggt ceaggeceae gatgeggtee aegteettee
                                                                    5100
acaggtegge caeaaacttg teggaggagg cattgageag ggaagteaeg ttgtcattea
                                                                    5160
gegggtecat attettggte agecaggeae tegeattata gtetacette ecagcataat
                                                                    5220
                                                                    5280
ggatgatgga gaactcagtc ttgtccttga gctgcttggg cttctggaac ttggggtggc
tgccctgctc cgtgcacagc ttctccacga aagacttgtc cgtggctttg gggaaccagc
                                                                    5340
attectegte cageagggee ageacacetg gagggttgtt eggtegeteg atgagetega
                                                                    5400
tgcagggctg taggtccagc ccaaagtcga tgaagttcca ctcgatgccc tcgcgctggt
                                                                    5460
actectectg etceaaggat gaacatggtg tggttgaaga getgetgeag etteteqttq
                                                                    5520
gtgtagttga tgcacagctg ctcgaaggag ttcacctcaa agatctcaaa tccagctata
                                                                    5580
tecaggatee ccaggaagga ageceettge egatgggtet tgtecaggge tttgtteaeg
                                                                    5640
cgggtgagta tccagcggaa aaggcgctca tatgttgcct tggccaaagc ctctacagca
                                                                    5700
aagtcagcct gttcttttgt ctgagctttc tgtaccacat ctcgcccaac cttgatacga
                                                                    5760
ggagtgagga tggatctggt gaaatctgtc acattaattc ccatgaggtg gcaaactttc
                                                                    5820
tgagcagctg tgttatctgg catggacgcc tggtctgtgt ttctttcctt cttgaagacg
                                                                    5880
atatttccaa gctgcaggac cgatgatacc accttcaata tggatagctg ctcctcctcg
                                                                    5940
ctgaaaccca tgattgccat ggcctccacg gtttcctgga acatctcatc atcctgggct
                                                                    6000
gctgggatgg gcacaaagcc attggagagg aaggtgtagt tgttgaagcc ctccaaaagc
                                                                    6060
aagtcacttc tcatcttctc cttggctcca gcaatcatgt agtaaaagat gtggaatgtc
                                                                    6120
ctctcgtctc tggcttggcg aattgcccgt gatttttcta gcagataggt ctcaatgttg
                                                                    6180
geteceaega tgtaaceegt gaegtegaag ttgatgegga tgaatttgee gaategtgag
                                                                    6240
gagttgtcgt tcttcactgt tttggcgttg ccgaaagcct ccagaatcgg gtttgcttgt
                                                                    6300
agaagetget tttccagete teeegtgata ettgtgtett tettgeeett gtgggaggag
                                                                    6360
gccaccacgg ccaggtactg aatgacette ttggtgtttt eggttttece ggetecagae
                                                                    6420
tegeetgtge atagaatgga etggteetee egatettgaa geatgeteeg gtaggeegtg
                                                                    6480
tctgcgatgg cgtagatgtg aggcggcatc tcgtgcctct tcttgccctt gtacatgtcg
                                                                    6540
acgatcttct ccgagtagat gggcaggtgt ttataggggt tgaccaccac gcagaagagg
                                                                    6600
ccagagtacg tatatattag ccctgagaag taccgctccc tcaggttgtg tagca
                                                                    6655
```

```
<210> 6003
<211> 2462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (727)...(2123)
<223> similar to gi4378022 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6003 60 ggccctcctc agtgccggcc gccatggcag aggcgtccgg cgcggggaaa atctagcccg 120 gggatttcat gcggcctagc tcggttccgc ctcctcctcg cgcggcccca gcggctgccc 180 gcaccccage eccaeteegg gceteegtgt eteteetgtg ategcaetga caeggeeggg 240 gggttagaat ggaacaaact gaaggcccga tgagagaaag ggaaagttaa ggatgctgga 300 360 gcagaacaat ggatttetet ttetetttea tgcaagggat catgggaaac acaattcage aaccacctca actcattgac tccgccaaca tccgtcagga ggatgccttt gataacaaca 420 gtgacattgc tgaagatggt ggccagacac catatgaagc tactttgcag caaggctttc 480 agtacccage tacaacagaa gatetteete caeteacaaa tgggtateca teateaatea 540 gtgtgtatga aactcaaacc aaataccagt catataatca gtatcctaat gggtcagcca 600 atggctttgg tgcagttaga aactttagcc ccactgacta ttatcattca gaaattccaa 660 720 acacagacc acatgaaatt ctggaaaaac cttcccctcc acagccacca cctcactcct teggtaceae aaactgtgat teeaaagaag actggeteae etgaaattaa actaaaaata 780 accaaaacta tecagaatgg cagggaattg tttgagtett ceetttgtgg agacetttta 840 aatgaagtac aggcaagtga gcacatgaaa tcaaagcatc gaaagcagaa aagaaaagag 900 gaaaaaaagc aacaagcatg actcatcaag atctgaagag cgcaagtcac acaaaatccc 960 1020 caaattagaa ccagaggaac aaaatagacc aaatgagagg gttgacactg tatcagaaaa accaagggaa gaaccagtac taaaagaggg aagccccagt tcagccaata ctatcttctg 1080 ttccaacaac ggaagtgtcc actggtgtta agtttcaggt tggcgatctt gtgtggtcca 1140 aggtgggaac ctatecttgg tggccttgta tggtttcaag tgatecccag cttgaggttc 1200 atactaaaat taacacaaga ggtgcccgag aatatcatgt ccagtttttt agcaaccagc 1260 cagagaggc gtgggttcat gaaaaacggg tacgagagta taaaggtcat aaacagtatg 1320 aagaattact ggctgaggca accaaacaag ccagcaatca ctctqaqaaa caaaaqattc 1380 ggaaaccccg acctcagaga gaacgtgctc agtgggatat tggcattgcc catgcagaga 1440 aagcattgaa aatgactcga gaagaaagaa tagaacagta tacttttatt tacattgata 1500 aacagcctga agaggcttta tcccaagcaa aaaagagtgt tgcctccaaa accgaagtta 1560 aaaaaacccg acgaccaaga tctgtgctga atactcagcc agaacagacc aatgcagggg 1620 aggtggcctc ctcactctca agtactgaaa ttcggagaca tagccagagg cggcacacaa 1680 1740 gtgcggaaga ggaagagcca ccgcctgtta aaatagcctg gaaaactgcg gcagcaagga aatccttacc agcttccatt acgatgcaca aagggagcct ggatttgcag aagtgtaaca 1800 tgtctccagt tgtgaaaatt gaacaagtgt ttgctcttca gaatgctaca ggggatggga 1860 aatttatcga tcaatttgtt tattcaacaa agggaattgg taacaaaaca gaaataagtg 1920 tcagggggca agacaggctt ataatttcta caccaaacca gagaaatgaa aagccaacgc 1980 2040 agagtgtatc atctcctgaa gcaacatctg gttctacagg ctcagtagaa aagaagcaac agagaagatc aattagaact cgttctgaat cagagaaatc cactgaggtt gtgccaaaga 2100 agaagatcaa aaaggagcag gttggcttcc tacatgtaga gagttaaaac attgtatttq 2160 taaatgttgt ggcttacatt cctgtcttaa aagaaagaga aactttcccc cacactgagt 2220 tteetttetg gaetatetta aegettetgt eetggtgggt teeagtgete agttttaata 2280 cagccatccc tgtgattctg cttcaagcat tttcacagaa aacaggtttc aggagatggg 2340 aagccagtgg tgcaagactt aaaaaatcct tcacatttat ttagaagttt ctgttatcag 2400 cagaatgatt tcatgttttt atgattttta tttggaacca tcattgagtt ccttttttt 2460 tt 2462

```
<210> 6004
<211> 4652
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (939)...(1912)
<223> similar to gi495568 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6004 ctcattgtgt ctgtgtcgag gcgtcgggag ggcctaagtc cgtgtgcggt gcccttcggc 60 cggcctgagc cccagagtca gctccccttt ctcgcccagc gcccccaggc cgctcccggg 120 gctcacggaa tagtaaagaa acacatcata aaacctccca ggacataaag gtgagcacag 180 240 accctgtttg gatcaagtca gttcctggag cctgaatgat gactgctgaa tcacgggaag 300 ccacgggtct gtccccacag gctgcacagg agaaggatgg tatcgtaata gtgaaggtgg aagaggaaga tgaggaagac cacatgtggg ggcaggattc caccctacag gacacgcctc 360 ctccagaccc agagatattc cgccaacgct tcaggegett ctgttaccag aacacttttg 420 ggccccgaga ggctctcagt cggctgaagg aactttgtca tcagtggctg cggccagaaa 480 taaacaccaa ggaacagatc ctggagcttc tggtgctaga gcagtttctt tccatcctgc 540 ccaaggaget ccaggtetgg etgeaggaat acegeeeega tagtggagag gaggeegtga 600 cccttctaga agacttggag cttgatttat caggacaaca ggtcccaggt caagttcatg 660 gacctgagat gctcgcaagg gggatggtgc ctctggatcc agttcaggag tcctcgagct 720 ttgacettca teaegaggee acceagteee actteaaaea ttegtetegg aaaceeegee 780 tcttacagtc acgagetett cetgetgeec acatteetge acceceteat gagggtagte 840 ccagagacca ggcgatggca tctgcactat tcacagcgga ttcccaggca atggtgaaga 900 tegaggacat ggetgtgtee eteattetgg aggaatgggg atgteagaat etggetegga 960 ggaateteag tagggacaac aggeaggaga attatgggag egeattteee cagggtggtg 1020 aaaacaggaa tgagaacgag gagtcaacct caaaggctga aacctcggaa gattcagcat 1080 cacgcgggga gacaacagga agatcccaga aagagtttgg agagaaacgt gaccaggagg 1140 gcaaaacagg agaaagacag cagaaaaacc ctgaggagaa aaccaggaaa gagaaaagag 1200 attcagggcc agctatagga aaggacaaaa aaaccatcac aggagagaga ggtccaaggg 1260 agaaggggaa aggattggga agaagettea gtetgagete caaetteace acceetgaag 1320 aagttcccac gggaacaaag tctcacagat gtgatgaatg tggtaaatgc ttcacgagaa 1380 gttcaageet tateegeeat aaaataatee acaetggaga aaageeetat gaatgtagtg 1440 agtgtgggaa agccttcaag tcttaactcc caaccttgtc ctgcatcaga ggatcccaca 1500 caggagagaa acctcatgaa tgtaacgagt gtggcaaagc cttcagccac agttccaatc 1560 tcatcctcca tcagcgcatc cactctggag agaaacctta tgaatgtaat gagtgcggga 1620 aggeetteag ecagageteg gaeeeteace aageateaga gaatteacae gggggagaaa 1680 ccctatgaat gtagtgaatg tggaaaagct ttcaaccgaa actcatacct gattttgcat 1740 cggagagttc acactcgaga aaagccctac aagtgcacta agtgtggcaa gggccttcac 1800 cegeagetee acceteacte tgeateacag aatecatgee agagagagag cetetqagta 1860 cageceagee teeettgatg catttggege gtteetgaaa agttgtgtgt aaaggaagaa 1920 tttgccatca agccatttcc cccttttgtt tctaaaatta tttcagagat gtgtgctcct 1980 ggagggaaaa agaaatacag cctcaacaga ttaaaaaaca aaagtcacac ttaaggatcc 2040 ttctagtcac atcagcagtg ttctgccttt atgtagtagt tgggcatata atccttccac 2100 acageceetg cagggaaagg etaatettae ggataateea egtgagattt eeacacaaga 2160 gaaaagcaca cgcatagtga aatgtcagtc ttttcagtaa tgaggatacc tttaaggcac 2220

```
tettggacte teggeaacea caacataata gttgaaagat caagattgge tecaccaaag
                                                                   2280
tgatacggag gttaggatgc tacttgctgc aaacaagccc tactttggcc aacatcctgc
                                                                   2340
ttatttttca aaaaagaggg acagtgaaaa ccaaaaacga aattgttaca tgctgctcaa
                                                                   2400
ggtagttata tatacgataa gttgtatata tgatcactgg tagcctacca aagctgtaaa
                                                                   2460
aaactaggac tgtgctaatc agtatcaaac caaaaggatt tctatctctt cccgaaagag
                                                                   2520
agggtatgtg caccagtcta cagttccaaa ggactgcaac aaatgtagga tggttctgtc
                                                                   2580
ctcatccctg agatcagttc tactgaaatg gcaacaacaa ctccaaatac atctctccct
                                                                   2640
tettgaaate eetaaageae tategeaete etaaatgeat tteteeacaa gttageaett
                                                                   2700
                                                                   2760
gattgtatac tgtcttttaa tccttcattg tttcatgtat gaagttttta atcacccct
aacccccaaa aaagattcgg ttgtcaaggg atatatttct atccctgcca gcacagtgct
                                                                   2820
                                                                   2880
qqacataqtq aqtactgaac acctaagagg cactcattca gactgacttc tacaggactt
                                                                   2940
ctacgtgtgt gataaaagcc tgtgaatcgt gagtccctga aatatggtag cctggcccag
gttttaaaga gggcctttgt agccccaagg catgctaaac ctctagggtc tgatgctgtt
                                                                   3000
tttgttccaa atattaacga aaggcactag tcagccgcct gcatagacct ttttaacagt
                                                                   3060
gagttaatac catggaatgt cagaaatgac tttatcatcg tcatcttgaa gaaaaatatg
                                                                   3120
aaccetqatq aaggteattt tttttttttg acatetttet gtggcaaage tettagaatt
                                                                   3180
ctttgcagtt agctgctgaa cagtatgatg atttggggat tttctgaatc atttgtactt
                                                                   3240
agatactqqa qttcaqaaga tgtgattttt gttgcttttc agaaaaagga acgtggtagg
                                                                   3300
gagtgttttt tcccacgctt ttccagtaac tttgcaaaag cattaattgt tcactggcaa
                                                                   3360
ttactaaatg tattttgttg ctctgagaaa ctcagcagtg tactgagatg tggctggctg
                                                                   3420
3480
ttatgaaact ttcattggtc ccatcgttgt gcgcagggtg caactggcta cctagaagct
                                                                   3540
                                                                   3600
gatggcagga gactgtttca cacacaggag attgtgagct gtgtaagtag tcatcgccac
tcaagtagga caagggtcct acccaaggct aggaccgccc tgcggaaaca gaaacataga
                                                                   3660
                                                                   3720
ctgagaacaa acctcaagac tatcagtgtg acctccccat aacaagagaa ccccatatat
agtttgagac tttcccttga gaaacttata ctaaaactat tactcatcag tcattcactg
                                                                   3780
atcagcagct aaagtccatg agaccaaatg gttttatatg gaaccaacaa agtgggagct
                                                                   3840
                                                                   3900
aaaactgcac agtggtcatt ctttggcctc tccttggctt tatgacttaa accaactaca
                                                                   3960
acttccctat agettctaag cagtttcatc ageattactt gggaaaacgt gttgcaagtc
aaccagtcac taggatattt ctacccatgc aacggaagaa aaacccatta ctccagaaga
                                                                   4020
                                                                   4080
qtatatctaa qtaactaaaa tggaggcaga aaatgtttta aggattttct tcaaagaata
                                                                   4140
agecacagea atggttttgt agaaaactee tgtgettttg ageaaggaet tttgeeetet
agaaagcaac tgaggccagg tgcggtggct cacgcctgta atcccagcac tttgggaggc
                                                                   4200
cgaggtgagc ggatcacctg aggtcaggag ttttgagacc agcctggcca acatggtaaa
                                                                   4260
atcccgtctc tactaaaatt ataaaaatta gccgggcatg atggtgggca cctgtaatcc
                                                                   4320
cagctacttg ggaggctgag gcaggagaat cacttgaacc caggaggcag aggttgcagt
                                                                   4380
gagccaagat tgcacactgc actccagcct gggtgactag caaaactcca tctcaaaaaa
                                                                   4440
                                                                   4500
aaaaaaaagg ggcgccttt taaaagaacc ctgggggggc ccaaatttac ggggggtggc
cgaggacatg gtttttccct tatggggagc catttaaaac cttggccctg gccccttttt
                                                                   4560
                                                                   4620
taaaatgtaa tagaggggaa aaccaccaac ttggtaattt ttgaaaggaa cctttatttt
                                                                   4652
ggggggtaa cttaatggga gaacaaacct ag
```

```
<210> 6005
<211> 3156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (92)...(2052)
<223> similar to gi485123 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6005 60 tttcgtggtg gcggcgtccg gagggtgctg gtttgttctc ggtgaacggc gcgcggggtc teteetgagt gegagetaeg ggaeettege catgeegggg atggtaetet teggeeggeg 120 ctgggccatc gccagcgacg acttggtctt cccagggttc ttcgagctgg tcgtgcgagt 180 240 gctgtggtgg attggcattc tgacgttgta tctcatgcac agaggaaagc tggactgtgc tggtggagec ttgctcagca gttacttgat cgtcctcatg attctcctgg cagttgtcat 300 atgtactgtg tcagccatca tgtgtgtcag catgagagga acgatttgta accctggacc 360 geggaagtet atgtetaage tgetttacat eegeetggeg etgtttttte eagagatggt 420 ctgggcctct ctgggggctg cctgggtggc agatggtgtt cagtgcgaca ggacagttgt 480 aaacggcatc atcgcaaccg tcgtggtcag ttggatcatc atcgctgcca cagtggtttc 540 600 cattatcatt gtctttgacc ctcttggggg gaaaatggct ccatattcct ctgccggccc cagecacetg gatagteatg atteaageea gttaettaat ggeeteaaga cageagetae 660 aagcgtgtgg gaaaccagaa tcaagctctt gtgctgttgc attgggaaag acgaccatac 720 tegggttgct ttttegagta eggeagaget ttteteaace tactttteag acacagatet 780 ggtgcccagc gacattgcgg cgggcctcgc cctgcttcat cagcaacagg acaatatcag 840 900 gaacaaccaa gagcctgccc aggtggtctg ccatgcccca gggagctccc aggaagctga tetggatgca gaattaaaaa actgccatca ttacatgcag tttgcagcag cggcctatgg 960 1020 gtggcccctc tacatctaca gaaaccccct cacggggctg tgcaggattg gtggtgactg ctgcagaagc aagaacccac agactatgac ttggtcggag gcgatcagct tcaactgtca 1080 cttcggctcc catcctgcac acccacaggg ctgcagtaca gggacttcat ccacgtcagc 1140 ttccatggac aaggtttacg gagctgccgt ttttagtggc tctggatcac aggaaagagt 1200 ctgttgtggt cgctgtgagg gggaccatgt ctctgcagga tgtccttacg gacctgtcag 1260 1320 cggagagtga ggtgctagac gtggagtgtg aggtgcagga ccgcctggca cacaagggta 1380 tttctcaagc tgccagatac gtttaccaac gactcatcaa cgacgggatt ttgagccaag cetteageat tgeteetgag taceggetgg teatagtggg ceacageete gggggagggg 1440 eggeegeect getggeeace atggteagag eegeetacee geaggteagg tgetaegeet 1500 tetececace eegggggetg tggageaaag etetgeagga atatteteag agetteateg 1560 tgtcactcgt cctggggaag gatgtgattc ccaggctcag tgtgaccaac ttggaagatc 1620 tgaagagaag aatcttgcga gtggtcgcgc actgcaataa acccaagtac aagatcttgc 1680 tgcacggttt gtggtacgaa ctgtttggag gaaaccccaa caacttgccc acggagctgg 1740 acgggggcga ccaggaagtc ctgacacagc ctcttctggg ggagcagagc ctactgacgc 1800 gctggtcccc ggcctacagc ttctccagcg actccccact ggactcttct cccaagtacc 1860 cccctctcta ccctcccggc aggatcatcc acctgcagga ggagggcgcc tcggggcggt 1920 ttggctgctg ctctgctgct cactatagcg ccaagtggtc acacgaagcg gaattcagca 1980 aaatactcat aggtccgaag atgctcaccg accacatgcc agacatcctg atgcgggcct 2040 tggacagcgt ggtctccgac agagcggcct gcgtctcctg tccagcacaa ggggtctcca 2100 gtgtggacgt ggcctgacca gggccactgg aaactgtccc aggaacgatg gactcacgct 2160 tttgtcctta aactgactta ccatccgagg agttcccatg acgccaaaac agcgaatgtc 2220 catcaacagg aatcggatgg gaacagaatt ccatggtctc aatgacttaa gtttatggga 2280 agtcattgtg gccataatgg tagcagaagt agcgagcacg ctcaggtgat aggacgactc 2340 ctgagaccca gcgaccgtgg agacagcctc gggaagccct ggcccgtgga tggatccctt 2400 ggctgtctga ggactgctcc agaagtgcgg gaatccaggg cccacccaga agaccgtgaa 2460 cagtteetta geeteecace eccaaggeag etetttteat ecaacteagt ttacaggegt 2520 ggtttgtttt tcaaactggg cttcctggat gtacaaatgg aactgtggtg agggtgcggg 2580 ctggggtttt ctcctgggcg tcaccaaggg cagccctggg ctctggctgg ggatgaagac 2640 gaaacccgat cgggaaagta agtggagccc ccggccccgc cgagccacag ccccccaact 2700 gcctattccc actgcccagt tgtttgtcca catcaggagt tgctgattga attcttgcta 2760 etettetgge tetggggteg gecagtggat teaggagttg aaacaataaa gegegegtea 2820 cgatagtgct tgtgtgtaca gctgcgtgct ctcttattgg ggatttccag gtagcgctac 2880 tatactgggt ggttgtagag caatgatgtt tccacgtttt ttttaaaccc tggggttctg 2940 gctacagatg gaagattgcc caagcactga tttcaccccc tctcccaccg gaagcccaac 3000 3060 agaatgacag gagggagatt tctccaaaaa agcagagacc cacaggatgg gaaaagacac tecaacaaca gteagaggae geacagtaca gaacettaag ggggaaggaa agacatgaae 3120 tgaccccagc ttacaagacc ctgggcagct gtgaag 3156

```
<210> 6006
<211> 3143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (104)...(2945)
<223> similar to gi33985 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6006 aactgtactc ctctgctgtt cctttgaact tggttcagta ggaagaagtg atatcctccc 60 cagaccatct gctttgggga gcttggcaaa actgtccagc aaaatgaaaa gactcacgtg 120 ctttttcatc tgcttctttc tttctgaagt atcaggcttc gaaatcccca taaatggact 180 ttctgaattt gtagactatg aagatcttgt ggaactggcc ccaggcaaat ttcaattggt 240 ggcagagaac cggagatatc agagaagcct tccaggagaa tcggaagaaa tgatggaaga 300 ggttgatcaa gtaactcttt atagctataa agtccagtct actattactt ctcggatggc 360 caccaccatg atccagagca aagtggtgaa caattccccg cagcctcaga atgtcgtgtt 420 tgatgttcag atccccaaag gagcattcat ttccaacttc tccatgactg tggacggcaa 480 gacatttagg agctctatta aggagaaaac tgtgggccga gctctttatg cacaggccag 540 agcaaaaggc aagacggctg gcttggtgag gagcagcgct cttgatatgg aaaacttcag 600 aacggaagta aatgtcctcc caggagcaaa ggtgcagttc gaacttcact accaggaggt 660 gaagtggagg aagctgggct cctatgagca caggatctat ctgcaacctg gacggctggc 720 caaacactta gaggtagatg tgtgggttat cgaaccacag ggactgagat ttcttcatgt 780 tecegacaea tttgaaggee atttegatgg tgtteeggte atttetgaag ggacaacaga 840 aggcgcacgt ctccttcaag cccacggtag cacagcagag aatatgccct agctgccggg 900 agactgcggt agatggggaa ctggtggtgc tgtatgacgt gaaaagagaa gagaaggctg 960 gtgaactgga ggtgtttaat ggatattttg tccacttctt tgctcctgac aacctggacc 1020 caattcccaa aaacatcctc tttgtcatcg atgtgagtgg ctccatgtgg ggagttaaaa 1080 tgaaacaaac tgtggaagca atgaagacca tattggatga cctcagagca gaagaccatt 1140 tctctgtgat tgatttcaac cagaacattc gaacttggag aaatgattta atttcagcta 1200 caaaaacaca ggttgcagat gccaagaggt atattgagaa aatccagccc agtggaggca 1260 caaacatcaa cgaagcactc ctacgggcaa tcttcatttt gaatgaagcc aataacttgg 1320 gactgttaga ccccaactcc gtctcgctga tcattttggt ttctgatgga gatccaacag 1380 tgggcgaact aaaactgtca aaaattcaga aaaacgttaa ggagaacatc caagacaata 1440 teteettgtt eagtttggge atgggatttg atgtggaeta tgattttttg aagagaetgt 1500 ccaatgaaaa ccatggaatt gcacaaagga tttatggaaa ccaggacacg tcttcccagc 1560 ttaagaaatt ctacaaccag gtctccactc cattgctccg gaatgttcag ttcaactatc 1620 cccatacatc agtcacggac gtcactcaaa acaatttcca taactacttt ggaggctcag 1680 agattgtggt ggcaggaaaa tttgaccctg ctaaattgga tcaaatagag agcgttatca 1740 eggegaette ggetaacaeg eagttagtet tggagaeeet ggeecagatg gaegaettge 1800 aggattttct atcgaaagac aagcatgcag atcccgattt caccaggaaa ctgtgggcct 1860 atctaaccat caaccaactg ctagetgaac gaageetgge teetacaget geegecaaga 1920 gaagaattac aagatcgatc ctgcagatgt ctctagacca ccacattgtg actccgctga 1980 cctcgctggt gatcgagaac gaggctgggg atgagcgcat gctggcggat gccccaccgc 2040 aggatecete etgetgetea ggggeeetgt attacggeag caaagtggtt ecagatteca 2100 ccccgtcttg ggccaatcct tcaccaacgc ccgtgatctc catgctggca caaggatctc 2160 aggtgctaga gtccacgcca cccccacatg tgatgagagt tgaaaatgac ccacatttca 2220

```
2280
tcatttatct accaaaaagc caaaagaaca tttgtttcaa tattgactca gaacctggaa
                                                                     2340
aaatootoaa ootggtttot gaoocagaat caggaattgt agtoaacggt cagottgttg
                                                                     2400
gtgccaagaa gcccaacaat ggaaaactaa gcacctattt tggaaaactg ggattttatt
tccaaagtga agacataaaa atagaaatca gcactgagac catcaccctg agccatggtt
                                                                     2460
ctagcacatt ctccttgtcc tggtccgaca cggctcaagt cacgaatcag agggtgcaga
                                                                     2520
                                                                     2580
tctcagtgaa gaaagaaaaa gtggtaacta tcaccctgga taaagagatg tccttttctg
                                                                     2640
ttttacttca tcgtgtttgg aagaagcatc ccgtcaatgt tgactttctg ggaatctaca
                                                                     2700
taccccctac aaacaagttc tcacctaaag cccacggact aataggccag ttcatgcagg
                                                                     2760
aaccaaagat acacatcttc aatgagagac caggaaagga ccctgagaag ccagaggcca
gcatggaagt gaaggggcag aagctgatca tcaccagggg cttacagaaa gactacagaa
                                                                     2820
cggatctagt gtttggaacg gacgttacct gctggtttgt gcacaacagt ggaaaaggat
                                                                     2880
teattgaegg geattacaag gattactteg tgeeteaget etacagettt eteaaaegge
                                                                     2940
cttaaaggtt tatagtttgg gaaattatat atattaatat acatctttcc cctgtcactt
                                                                     3000
ttgcagatat tcttcggttt gaataattaa aatgaaccag atatcagggt ggttaattaa
                                                                     3060
                                                                     3120
aatgaaacaa gataacaggg tggtttataa agccttgtaa acccccctaa aaaaataaac
cattttacaa atgaaaaaaa aaa
                                                                     3143
```

```
<210> 6007
<211> 1622
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1381)...(849)
<223> similar to gi4335943 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6007
ttttttttt ttctggtttt cctttttatt taatcaaagg acctggtgaa taaacataaa
                                                                       60
tacagcacaa ttacttcagg atcattcttc atattgtata cacacaaacc catgaacata
                                                                      120
atctgaaaga aacctgtaag acaagcaatg aaatggcata cagctttttc cttcccctcg
                                                                      180
ctcaaaaaaa aagtttaaac acacaaactt acaatctcat caggcacaca ctcctcttgt
                                                                      240
gacaaatgat tccagaccat aaatagtggg tgccaaagaa acttatatgc ttaacatatg
                                                                      300
aataacettt gttaatgaaa aaacaggagg cagcecataa tggattaaga tacatteagt
                                                                      360
tactggataa ctaggttgtg ccctaaaggg cattttatcc aaaaggagaa atcgtggctg
                                                                      420
gcagagaaaa gcgatatata ccttacacaa tgagaaaata aactggcaag attaatggca
                                                                      480
tgcatgttta atactgggaa aatcacagcc ctccaaaatt tctgcacggt ttgttataaa
                                                                      540
agecetetge acteaactaa aattaaaatg atettaaaag gataataett gtaaagttta
                                                                      600
agteteetea gecacagaaa ttgeaatgga aataaatgtt cagagteeat ttteaaaaca
                                                                      660
aaaccaaaac gaaaaatcta ttcttccgat gacatgcaag atacactgct ctacattccc
                                                                      720
aatgactagg aaaaaaaaaa cctcaagtca atttttagtt tgcagatgct caagaatttt
                                                                      780
gtattccagt agttgttggt gaaaagatcc aaaagatttg aactcctgct ggaatacaaa
                                                                      840
attettgage atetgetttg taattgtaag ageaattgtg taeatetgag taaeggtgta
                                                                      900
caccacagta aacatttcca caccggcatt caaacccagt aagtcccact ttcttcctgc
                                                                      960
acatgaaaca gegattettt ttttgttteg gttttteaag agaettgett tgetetteag
                                                                     1020
atggctgctg tgctgtgtct gatactgaag cctgcacatc ttctgtttca ggtactgctt
                                                                     1080
tgtccacaga tgtactgtcc aattgagaag atgctacaga ttctgataaa agtgactgat
                                                                     1140
ttgatacagg gctgggctgc atagatgaag atgtagagtc taatgctgac tgggcttctg
                                                                     1200
gcacactgcc atctgtgcat tgaacaggtg ggcttattct accattacta ctattctgtc
                                                                     1260
```

```
tttgaagatg ttetttatag catactgaac acatgccatt tgtacgaggg tttecataaa 1320 atecacagec agtggaacaa agcataggca ettggetgtg attagtttet tgagecatgt 1380 teetcagttg cacacecaag tteeeettet ggtaageage taagteagtg teetttgate 1440 tggeggeggg teeteegee tgacaegetg egegeegeeg eeggtageeg eeggtgaatg 1500 ggtacaggta atgeegeega acceetgett geeteegtee geeaeegeeg geeeeteegt 1560 eegetgttta ttaaaetttt etgtttggtt gtteggeeta tgaegegaee gegetegtge 1620 eg
```

```
<210> 6008
<211> 1081
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1082)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (133)...(684)
<223> similar to gi5360235 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6008
aaactacatt ttgcaaagtc attgaactct gagctcagtt gcagtactcg ggaagccatq
                                                                       60
caggatgaag atggatacat caccttaaat attaaaactc ggaaaccagc tctcgtctcc
                                                                      120
gttggccctg catcctcctc ctggtggcgt gtgatggctt tqattctqct qatcctqtqc
                                                                      180
gtggggatgg ttgtcgggct ggtggctctg gggatttggt ctqtcatqca qcqcaattac
                                                                      240
ctacaagatg agaatgaaaa tcgcacagga actctgcaac aattaqcaaa qcqcttctqt
                                                                      300
caatatgtgg taaaacaatc agaactaaag ggcactttca aaggtcataa atgcagcccc
                                                                      360
tgtgacacaa actggagata ttatggagat agctgctatg ggttcttcag gcacaactta
                                                                      420
acatgggaag agagtaagca gtactgcact gacatgaatg ctactctcct qaaqattgac
                                                                      480
aaccggaaca ttgtggagta catcaaagcc agggactcat ttaattcgtt gggtcggatt
                                                                      540
atctcgccag aagtcgaatg aggtctggaa gtgggaggat ggctcggtta tctcagaaaa
                                                                      600
tatgtttgag tttttggaag atggaaaagg aaatatgaat tgtgcttatt ttcataatgg
                                                                      660
gaaaatgcac cctaccttct gtgagaacaa acattattta aatgtgtgaa gaggaaggct
                                                                      720
ggccatgacc caaggtggac ccaactaccc ttaatgccaa agaggtggac aggataacac
                                                                      780
agataagggc tttattgtac aataaaagat atgtatgaat gcatcagtag cctgaaaatt
                                                                      840
geettattte teeetttett eteaetggag ttatttttaa tattatettt eetateagaa
                                                                      900
ttacctagtc ccttctttga atatacagaa gccatcacgt gagtttatca tttgcttccc
                                                                      960
aattgttcta ttttccttta attttctttc ttcttgtcct tcatttctaa ttacctgaac
                                                                     1020
atggtatgat ttactgcatc ttcagatata cacatataac atcaaaantn aggccaatat
                                                                     1080
a
                                                                     1081
```

```
<211> 1630
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (274)...(1333)
<223> similar to gi311833 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6009
gtctaaacac ttctttccct gaggactgga agacattaga ataagctcca gacaattcaa
                                                                       60
                                                                      120
acattgagat tcctgggaac taccagatag tagcatcagt tcaccaagaa atgaagctgg
tgaggcagtg aaaatccagg gcctagaaag ctgggaatgc catgacgtgg gcacattgaa
                                                                      180
                                                                      240
agacaagagg caggcatgat cagccttgaa ctttaggaag atcccaggaa gctgatggaa
                                                                      300
gacaagatgt ggagtgaatg tgaaggtcca gaaatgtcct tggtgtgtct gacagacttt
                                                                      360
caggeceatg egegagagea getgtetaag teaacteggg attttattga aggtggagea
gatgacagca tcacgcggga tgacaacatt gcagcattta aaagaattcg cctccgtccg
                                                                      420
                                                                      480
cggtacctga gagatgtgtc tgaggtggac accagaacca caatccaagg ggaggagatc
                                                                      540
agtgececta tttgtatege acceacaggg ttecaetgee ttgtetggee tgatggggaa
                                                                      600
atgagcacag caagagctgc ccaagcggct tggtatctgc tacatcacca gcacatttgc
                                                                      660
cagetgtage ettgaagaca ttgteattge ageteeegaa ggeeteegat ggtteeaaet
ctatgtgcat ccagacctgc agctgaacaa acagttgatc cagagggtag aatccctagg
                                                                      720
tttcaaaget ttggtaataa etttggatac acetgtatgt ggcaacagge gacatgacat
                                                                      780
tcgaaaccag ttgaggagga acttaacact aacagatctt caatcaccta aaaagggaaa
                                                                      840
tgcaatacct tatttccaga tgactcctat cagcacttct ctctgctgga atgatctctc
                                                                      900
ctggtttcag agcataactc gattgcccat catcctgaaa gggattttga caaaagagga
                                                                      960
tgcagagtta gctgtgaagc acaatgtcca gggtatcatt gtttccaacc atggtgggag
                                                                     1020
gcagcttgat gaggttcttg cttcaattga tgctttgaca gaagtggtgg ctgctgtaaa
                                                                     1080
ggggaaaatt gaagtetace tggatggegg ggteegaact ggeaatgatg tgetgaagge
                                                                     1140
tetggeeett ggagetaagt geatttttet tggagaegea ateetatggg eeettgeete
                                                                     1200
caagggtgaa catggtgtta aggaagtttt gaacattttg acaaatgagt tccacacttc
                                                                     1260
catggcccct tacaggctgc cggtcggtcg ctgagatcaa tcgaaacttg gtccagtttt
                                                                     1320
ccaggctgta agaaaaaagg gccaataacc agactgctga ggttgcccac agaaggatcc
                                                                     1380
                                                                     1440
ccaaattcca gcaccagtgt gtgatgctgt ccttcctgga ccccattctg tccggaggct
                                                                     1500
catggeceat attteceaea tttetaatae caecaeceet gtgetteagg ceetecaaae
ccctqtqttc cccaaatqtt ccatqccctt ctttqtatca ctqactatta tatqttqctc
                                                                     1560
tettgeetaa atetteetet gaagtaaaag ateteaaaag gacagateat taatgactgg
                                                                     1620
                                                                     1630
aaaaaaaaa
```

```
<210> 6010
<211> 369
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(355)
<223> similar to gi4877550 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6010
agtccactgg catcttcatg accatagaga aggctggggc tgacttaatg ggggagccaa 60
aagggtcatc atctctaccc cctctgctga tgccccata ttcataatgg gcatgatccc 120
tgagaagtct gaaaacagcc tcaagatcat cagcaatgcc ttctgtacca ccaactgctt 180
aatccccgg ccaagcccat ccatgacaac tttggcattg tggaaggact tgtgaccaca 240
atccatgctg ccactcctgc ccagaagact cgatggcctc tgtgggaaac tgtggcatat 300
gtctgtgggg ctctccagaa catcatccct gcatctactg gtgttgccaa ggctgtgggc 360
aaggccatc
```

```
<210> 6011
<211> 3340
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(2213)
<223> similar to gi3043738 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6011 ttccgtcccg gagcatcacg ctgggagaag acttcgccgc tcggggccgc agcctgttgg 60 gcaaggcgag catcatggcc tcggattgcg agccagctct gaaccaggca gagggccgaa 120 accecaceet ggagegetae etgggageee teegtgagge caagaatgae agegageagt 180 240 ttgcagccct gctgctagtg accaaggcag tcaaagcagg tgacatagat gccaaaactc 300 ggcggcggat cttcgatgct gtcggcttca ccttccccaa tcgtctcctg accaccaagg aggegeegga tggetgeeet gaecatgtte tgegggettt gggtgtggee etgetggeet 360 gettetgeag tgaccetgaa etggeegeee ateeecaagt eetgaacaag atteeeatte 420 ttagcacctt cctcacagcc cggggggacc cggacgaatg ctgcccgccg ctccatgatt 480 gatgacacct accagtgcct gacggctgta gcaggcacac ccagagggcc tcggcacctc 540 attgctggtg gcaccgtgtc tggcctatgc caggcattcc tggggcacgg gtatggcttt 600 gaccaggccc tggcactcct ggtggggctg ctggctgctg ccgagacaca gtgctggaag 660 720 gaggeggage cegacetget ggeegtgttg eggggeetea gtgaggattt ecagaaaget gaggatgcca gcaagtttga gctctgccag ctgctgcccc tctttttgcc cccgacaacc 780 gtgcccctg aatgctaccg ggatctgcag gccgggctgg cacgcatcct gggaagcaag 840 etgageteet ggeagegeaa ceetgeactg aagetggeag eeegeetgge acaegeetge 900 ggctccgact ggatcccggc gggcagctcc gggagcaagt tcctggccct gctggtgaat 960 ctggcgtgcg tggaagtgcg gctggcactg gaggagacgg gcacggaggt gaaagaggat 1020 gtggtgaccg cctgctatgc cctcatggag ttggggatcc aggaatgcac tcgctgtgag 1080 cagtcactgc ttaaggagcc acagaaggtg cagctcgtga gcgtcatgaa ggaggccata 1140 ggggctgtta tccactacct gctgcaggtg gggtcagaga agcagaagga gccctttgtg 1200 tttgcctcgg tgcggatcct gggtgcctgg ctggccgagg agacctcatc cttgcgtaag 1260 gaggtgtgcc agctgctgcc cttcctcgtc cgctatgcca agaccctcta cgaggaggcc 1320 gaggaggcca atgacettte ecageaggtg gecaacetgg ecateteece caecacecea 1380 gggcccacct ggccaggaga cgctctccgg ctcctcctgc ctggctggtg ccacctgacc 1440 gttgaagatg ggccccggga gatcctgatc aaggaagggg ccccctcgct tctgtgcaag 1500

```
tatttcctgc agcagtggga actcacatcc cctggccacg acacctcggt gctgcctgac
                                                                    1560
agegtggaga ttggeetgea gaeetgetge cacatettee teaacetegt ggteacegea
                                                                    1620
ccggggctga tcaagcgtga cgcctgcttc acatctctaa tgaacaccct catgacgtcg
                                                                    1680
ctaccagcac tagtgcagca acagggaagg ctgcttctgg ctgctaatgt ggccaccctg
                                                                    1740
gggeteetea tggeeegget cettageace tetecagete tteagggaac accageatee
                                                                    1800
egagggttet tegeagetge catestette etateacagt ceeaegtgge gegggecace
                                                                    1860
                                                                    1920
coggetcag accaggeagt getagecetg teceetgagt atgagggeat etgggeegae
                                                                    1980
etgeaggage tetggtteet gggeatgeag geetteaceg getgtgtgee tetgetgeee
tggctggccc ccgctgccct gcgctcccgc tggccgcagg agctgctcca gctgctaggc
                                                                    2040
agtgtcagcc ccaactctgt caagcccgag atggtggccg cctatcaggg tgtcctggtg
                                                                    2100
gagetggege gggeeaaceg getgtgeegg gaggeeatga ggetgeagge gggegaggag
                                                                    2160
acggccagcc actaccgcat ggctgccttg gagcagtgcc tgtcagagcc ctgaggggtg
                                                                    2220
tccaccgggg acagacccag gggcgggcag agagggaagg agggaggagg catcttccct
                                                                    2280
gaageeeeca atetggeeee eeeeteeeca gaetteetee eeaaaacaee eeagetttet
                                                                    2340
ggettttetg agggeaaggg catggtgeec acceeteaag tgtaaggaac tgegtteege
                                                                    2400
ccctcaggcc cccatggggg cagggatcgg cttggaaatc aacgtggttg tccccgccag
                                                                    2460
                                                                    2520
gccggggaag gttggagcag cccccaggga ggggggcact aggtgtcatt gtgcccgatg
tetggetece etgeaggagg gaggetecag ggtaagacag ggetggeagg ageagactge
                                                                    2580
                                                                    2640
ctcagcccat gtgccctgcc ggccagggcg tgggctcccc tcggctgtgg tgcctcctct
ggcccccag gtccacgtcc tttaaattgg ccctttggct cttgcccttg gctcccttgg
                                                                    2700
gcagacagca ggcttaggcc attgatatcg cagttcttcc tatcagcttc agtgacccag
                                                                    2760
ggtctgaact gcctccatcc tagggcaacc tggggcagac aggcctggtg gggggtgggg
                                                                    2820
aaacctcctt ccacctgagc ttgcttgaag ggacccagag tctttgggcc cagatcttta
                                                                    2880
aacctttgtg tcgtgttgca gcagagtgac gatgggggtt ggggggttat ttattttgcc
                                                                    2940
tgtccttatc cctgcttgga cacctgagca tctgattcct gtccccctgg tgccatctgg
                                                                    3000
cctggctgga gccaggaaca ggagggacac ttccccagaa tccgcatgtt tccccagtga
                                                                     3060
ttacacteca etgecacegt ggtgeetgge tttaactece acceetgeta tgacteetet
                                                                    3120
ctgcagagac gcgactggcg gctccagcag ggactacctt tcttataaac ccagggggac
                                                                    3180
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacactettg
                                                                     3240
atcccttgct tccctccccc agtgcgttgt gagatcgcca agttcaaagc tgtgcacatg
                                                                    3300
tggacactca ataaatgttg cattggtgaa aaaaaaaaa
                                                                     3340
```

```
<210> 6012
<211> 1310
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (79)...(951)
<223> similar to gi443919 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6012
gttaaaaagg cggctgggcg gagccgcggg cctccgacgg cgggaggaca gcgctgcgag 60
gaggcgcccg ggacagtcat ggagcgccgc ctgggagtga gggcctgggt gaaggagaac 120
cggggctcct tccagccccc ggtctgcaac aagctcatgc accaggagca gctcaaagtc 180
atgttcgtcg gaggcccaa caccaggaag gactatcaca tcgaagaggg tgaagaggta 240
ttttaccagc tggaggaga catggttctc cgagtcctgg agcaagggaa acaccgggat 300
gtggtcattc ggcagggaga gatattcctc ctgcctgca gggtgcccca ctcaccacag 360
```

```
aggtttgcca acaccgtggg gctggtggtt gagcgaaggc ggctggagac cgagctagat
                                                                  420
gggctcaggt actatgtggg cgacaccatg gacgttctgt ttgagaagtg gttctactgc
                                                                  480
aaggaceteg geacgeagtt ggeeceeate atceaggagt tetteagete tgageagtae
                                                                  540
agaacaggaa agcccatccc tgaccagctg ctcaaggagc caccattccc tctgagcaca
                                                                  600
cgatccatca tggagcccat gtccctggat gcctggctgg acaqccacca cagggagctg
                                                                  660
caggcaggca caccactcag cctgtttggg gacacctatg agacccaggt gatcgcctat
                                                                  720
gggcaaggca gcagcgaagg cctgagacag aatgtggacg tgtggctgtg gcagctggag
                                                                  780
ggctcctcgg tggtgacaat ggggggacgg cgcctqaqcc tqqqcccctq qatqqacaqc
                                                                  840
ctcctggtgc taagctgggg accttcgtat ggcctgggga gcgaacacaa ggctctgtgg
                                                                  900
ccctgtctgt gaccccagga ccctgcctgc aaaaaaaagcc cctggggtga accctcttgc
                                                                  960
catggcctga aagcagccac aggtgtgcca agcaccctcg aagtgccatc cctgccaaac
                                                                 1020
aacteteeca geececacta eetetetgtg taetgeeget gtgteececa cagacetgea
                                                                 1080
cattgttgtc acceacete etgecettet cageceagat gecatgeece tgggegggea
                                                                 1140
geageteece atettetetg geagacteag cecactgeet tgeeagtett geeaggtgqt
                                                                 1200
ctaccccgg cccgctcct gcccattcct ctgtccctgc agactcagtq caqcacttcc
                                                                 1260
1310
```

```
<210> 6013
<211> 428
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(228)
<223> similar to gi3093371 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6013 ggacagatgc ctcatgttga agcaggggtc tcaacctggc tcacctccag caacattgag 60 cetecageae etectgteta ecaageeeeg tgecagteet geecagaaee eccaggagee 120 catgagecet etgactetee acaccatace ecagtecate etectecaga geacteggee 180 gcctgtcctg ccccagccac gtgctgtccg cccccgagaa gctctatgtc ataaatctta 240 actcagatgg gagagggagc ctcagagtca catagccctg ggcccaaacc ccagctcctc 300 cacccaagta ctgatggtca ggttcttcag cctcagtttc tgtagctgta agatggggag 360 aatgatetet gggagggtta aatgtgegge aaaatggeea agagttggge tetgggaeta 420 ggaccatg 428

```
<210> 6014
<211> 376
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (339)...(163)
```

<223> similar to gi1054887 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 6014
gtgtaagtca gagtgaagcc ttttacactc tgccctcttg gtacctgagt ccttgtctgg 60
catccaggaa ggataaggtc acacatggac ttgagggtgg tgaatgcaga ggtttattg 120
agtgatggaa gtggctctca gcaggatgat ggggaagctg gaaaggggat ggagtgggaa 180
gatgatcgtc gcctggaatt cggccatcct gtgaccgatc tcctctccag ccatccccag 240
ccaaactcct ctcaatgttc agatgctcct tctcttctcc tctgccatgc cattctgctg 300
ctcttctgtt ctgctcttct gcttgtggag cctgggggtt ggggtttcaa tgggtacagg 360
ataagggggc gtggtg
```

```
<210> 6015
<211> 2372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (238)...(1624)
<223> similar to gi3133134 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6015 attcggggca gcaacgcgca gaaggtggtg ggcgcctcgg gctcgggggg cgcgggcccc 60 caacccgatc cggcgggccc gggggggcgtc ccggcgctgg cggccgccgt cctgggcgcc 120 tgcgagcccc gctgcgccgc gccctgtccc ctgcccgcgc tcagccgctg tcggggcgcg 180 gggtcgcggg ggtcgcgggg cgggcggggg gcggcggggt ccggggacgc cgccgccgcc 240 gccgagtgga tccggaaggg cagcttcatc cacaaacccg cgcacggctg gctacacccc 300 gacgccaggg tectggggee eggggtetee tacgtegtge ggtacatggg etgeategag 360 gttctccgct ctatgcgctc cctggacttt aacacgcgca cgcaggtgac cagggaagcc 420 atcaaccggc tecatgaggc cgtgcctggc gtccggggat cctggaagaa aaaggccccc 480 aacaaggccc tggcgtccgt cctgggcaag agcaaccttc gctttgccgg catgagcatc 540 tecatecaca tetecactga tggeeteage eteteegtge etgecacgeg ceaggteate 600 gccaaccacc acatgccgtc catctccttc gcgtcaggcg gagacacgga catgacggat 660 tacgtggcct acgtcgccaa ggaccccatc aaccagagag cctgccacat cctggagtgc 720 tgtgagggcc tgggcacaga gcatcatcag caccgtgggc caagctttcg agctgcgctt 780 caagcagtac ctgcacagcc cgcccaaggt ggcgctgccc ccagaaaggc tggcaqqqcc 840 ggaggagtcg gcctgggggg acgaggagga ctctttggag cacaattact acaacagcat 900 cccggggaag gagccgccgc tgggcgggct agtggactcc aggctggccc tgacacagcc 960 ctgcgccctc acggccctcg accagggccc atctccttct ctaagagatg cctgcagcct 1020 gccatgggac gtggggtcca ccggtacagc tccaccgggg gacggctacg tgcaggcgga 1080 cgcccggggc cccccggacc acgaggagca cctgtatgtc aacacccagg gtctggacgc 1140 ccccgagccg gaggacagcc ccaaaaagga tctgtttgac atgcgaccct ttgaggatgc 1200 cctgaagttg catgagtgct cagtggcggc aggcgtgaca gcagcccctc ttcccttgga 1260 ggaccagtgg cccagcccc ctacccgccg ggcccctgtg gcccccacgg aggaacagct 1320 gcgtcaggag ccctggtacc acggccggat gagccgccgg gcggcagaga ggatqcttcq 1380

```
agetgaeggg gaetteettg tgegagaeag egteaceaac eeegggeagt atgteeteae
                                                                     1440
eggeatgeae geegggeage ceaageacet getgetegtg gacceegagg gegtggtaeg
                                                                     1500
gacgaaggac gtgctgtttg agagcatcag ccacctgatc gaccaccacc tgcagaacgg
                                                                     1560
geageceate gtggeegeeg agagtgaget geacetgegt ggegtggtet caegggagee
                                                                     1620
ctgagccagg tgaccgttct cagccctggc tcctgcctgt tctcagcccc ggctcctgcc
                                                                     1680
tgtcatggcc ttggggctct cagccctcct cctggatcct ggtcaggccg aaccaccgct
                                                                     1740
gestetestt setsegeatg agestetggs atggtestts stesagetgg sessgggetg
                                                                     1800
ggcagagcct cctcctgccg gggcccctgc ccaccccctc ctttgcctgg agtgagggtg
                                                                     1860
ttcataccaa agacggaacc atttcgcctt taaagaaaat atatccagaa gcagccgctg
                                                                     1920
ecteggagee etggeeegtg ggteeecete tegeetgget ggtteggtet aaegeeeegg
                                                                     1980
agagtcagag ctcccaggac cctggggagg aggcggattc cgggcctggc tgggcttcct
                                                                     2040
etteccacet gaggaetggg tgeacagttg tetttgaggg gggaegetta aggtgetttg
                                                                     2100
gggttctcag gccaggatac atgctggcgc tgaagtgcag gcagccttga ggtcacctgg
                                                                     2160
gatetegggg tagecagget getecaagae agtggatate gaggeagteg tgaggeeeet
                                                                     2220
actecacetg ggageagggg aaggaegtgg ttgeetggee tgggetgege eeageagett
                                                                     2280
ccccccaatc ctgccctccc agctgtcgac ccagatggga tgttcggatc ggtttgtaat
                                                                     2340
taaacctggg aatggccaca agaaaaaaa aa
                                                                     2372
```

```
<210> 6016
<211> 2667
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(983)
<223> similar to gi31336 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6016 gggggggac agtgctggga tgactatgga gacccaaatg tctcagaatg tatgtcccag 60 aaacctgtgg ctgcttcaac cattgacagt tttgctgctg ctggcttctg cagacagtca 120 agctgcaget cccccaaagg ctgtgctgaa acttgagece ccgtggatca acgtgctcca 180 gggaggactc tgtgactctg acatgccagg gggctccgca gcctggagga gcgactccat 240 tcagtggttc cacaatgggg aatctcattc ccacccacac gcagcccagc ttacaggttc 300 aaggccaaca acaattgaca gcggggagta cacgtgccag actggccaga ccagccttaa 360 gcgaccctgt gcatctgact gtgctttccg aatggctggt gctccagacc cctcacctgg 420 agttccagga gggagaaacc atcatgctga ggtgccacag cctggaggga caagccctct 480 ggtcaaggtc acattettee agaatggaaa ateecagaaa tteteecatt tggateecac 540 cttctccatc ccacaagcaa accacagtca cagtggtgat taccactgca caggaaacat 600 aggetacaeg etgtteteat ecaageetgt gaccateaet gteeaagtge ecageatggg 660 cagctcttca ccaatgggga tcattgtggc tgtggtcatt gcgactgctg tagcagccat 720 tgttgctgct gtagtggcct tgatctactg caggaaaaag cggatttcag ccaattccac 780 tgatcctgtg aaggctgccc aatttgagcc acctggacgt caaatgattg ccatcagaaa 840 gagacaactt gaagaaacca acaatgacta tgaaacagct gacggcggct acatgactct 900 gaaccccagg gcacctactg acgatgataa aaacatctac ctgactcttc ctcccaacga 960 ccatgtcaac agtaataact aaagagtaac gttatgccat gtggtcatac tctcagcttg 1020 ctgagtggat gacaaaaaga ggggaattgt taaaggaaaa tttaaatgga gactggaaaa 1080 atcctgagca aacaaaacca cctggccctt agaaatagct ttaactttgc ttaaactaca 1140 aacacaagca aaacttcacg gggtcatact acatacaagc ataagcaaaa cttaacttgg 1200

```
atcatttctg gtaaatgctt atgttagaaa taagacaacc ccagccaatc acaagcagcc
                                                                    1260
tactaacata taattaggtg actagggact ttctaagaag atacctaccc ccaaaaaaca
                                                                    1320
attatgtaat tgaaaaccaa ccgattgcct ttattttgct tccacatttt cccaataaat
                                                                    1380
                                                                    1440
acttgcctgt gacattttgc cactggaaca ctaaacttca tgaattgcgc ctcagatttt
tcctttaaca tcttttttt ttgacagagt ctcaatctgt tacccaggct ggagtgcagt
                                                                    1500
ggtgctatct tggctcactg caaacccgcc tcccaggttt aagcgattct catgcctcag
                                                                    1560
cctcccagta gctgggatta gaggcatgtg ccatcatacc cagctaattt ttgtattttt
                                                                    1620
tatttttttt ttttaqtaqa qacaqqqttt cqcaatqttq qccaqqccqa tctcqaactt
                                                                    1680
ctggcctcta gcgatctgcc cgcctcggcc tcccaaagtg ctgggatgac cagcatcagc
                                                                    1740
cecaatgtee agestettta acatettett teetatgees tetetgtgga teestastgs
                                                                    1800
tggtttctgc cttctccatg ctgagaacaa aatcacctat tcactgctta tgcagtcgga
                                                                    1860
agetecagaa gaacaaagag eccaattace agaaceacat taagteteca ttgttttgee
                                                                    1920
                                                                    1980
ttgggatttg agaagagaat tagagaggtg aggatctggt atttcctgga ctaaattccc
cttggggaag acgaagggat gctgcagttc caaaagagaa ggactcttcc agagtcatct
                                                                    2040
acctgagtcc caaagctccc tgtcctgaaa gccacagaca atatggtccc aaatgactga
                                                                    2100
ctgcaccttc tgtgcctcag ccgttcttga catcaagaat cttctgttcc acatccacac
                                                                    2160
agccaataca attagtcaaa ccactgttat taacagatgt agcaacatga gaaacgctta
                                                                    2220
tgttacaggt tacatgagag caatcatgta agtctatatg acttcagaaa tgttaaaata
                                                                    2280
                                                                    2340
gactaacctc taacaacaaa ttaaaagtga ttgtttcaag gtgatgcaat tattgatgac
ctattttatt tttctataat gatcatatat tacctttgta ataaaacatt ataaccaaaa
                                                                    2400
cattetgttt accttttcag ggctgtattg attggggtgt agactgaact atccggggtc
                                                                    2460
tgtttctttt cggtqatgaa agtcttgaga aggtagtaat ggataagatg tgagggagag
                                                                    2520
qaqaqaqqqa qatttqqaqt qtaqqqtqaq tqcccctctt cttaqaactg aatactcttc
                                                                    2580
ttctaatgaa cttgtattct tgtttccatg tcttcttccc tttccttcta tagcaaataa
                                                                    2640
agcattcact ttgttttgga aaaaaaa
                                                                    2667
```

```
<210> 6017
<211> 1989
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1376)...(691)
<223> similar to gi4929649 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6017
cctttttttt ttttttaaca tcaaatttgg tttatttcaa gtttgtaaca aaatatattc
                                                                       60
taggcaactt ttcagacatt gttttatagc atcataaacc ccataccact gctgtcattc
                                                                      120
caaaagctgc caggacactg gaagttatca agtggtccag cccaggaata caggtagaat
                                                                      180
tcacatgata ggtgataaga aagcaatgtc tgtgggccac tctgatccct ctttttacct
                                                                      240
tggtaggtaa ggtatgatct taagactata tgtactgagt cctattagtc aqtqaaaaaq
                                                                      300
attaaagtga caagttatgt gctttgttcc tatagctttg aagttcatcc acctcaccag
                                                                      360
caattggaag gteteaggte ttgcaggete tacceatqtq taateetqqq qcaqqtqtqa
                                                                      420
atcttgattt ttttaagaga ttactcaagg gagagaacaa cagaaacgga agccatgagt
                                                                      480
actgccccaa ttctagatta ggttagaggt tagaataaat taactaatgg qgagtqqtaq
                                                                      540
tgggtagcag tcagacccag gagacagatt tgtgtggttt cctgatctca gcaaggtcta
                                                                      600
aggaaaaaag cctccccgcc ccccacctt aaatagtggc atcaagtcat gaaggccagt
                                                                      660
gaaacgtggt tagtctcgta aaatgacttc cagttcttcc aggtccttct ggatagccaa
                                                                      720
```

```
atoctoctto gtgacatotg gcagotocag ggccaactto atocaccato tagottoaga
                                                                      780
                                                                      840
gtttttccct agttctctgt agcacttgga aatatatacc cttcctgctt tggaaaatcc
tggctgtagt tcttcagcct ttaggaagct ctggagggca tcttccacag tggcactgag
                                                                      900
                                                                      960
agggetttea ageaaggetg tageagtttt tttttetage cageteaggt gagagaeetg
atagcaccac ctgccaagaa gaaagtgagc catggggttt tctggctgga gagcaatggc
                                                                     1020
                                                                     1080
tttgtccaca tgctccttga agctaaagcc actctggatg cgcctctgga tgctctcatg
                                                                     1140
ctcagccagc tgaccacaaa gcaccgcata ccacaggtga caagtcagca ctcttcatcc
cccttctcca gagcagcctc tgcttcttct tttccatcta gggcatatga cttcttctcg
                                                                     1200
ctcacctcct cagtgagctc acacatgtca ctgtaggctc gggccaggcg ccagagaaag
                                                                     1260
tectgeegge ttecatacae cagettgttg ttgageagea getggaagee etceegettg
                                                                     1320
                                                                     1380
cettgeteat caccectgtg cagetegteg geetgetgea ggaggggeag cacatectee
                                                                     1440
aagcetgagg aacetecage etecagggca etggaggcae etgaagetge etetteetee
aagtcaagag aatcetttet ecceatette acagteteac ageteaette atetteeceg
                                                                     1500
                                                                     1560
tecteacttt etttgteaga gteeegetea ttgteagaet eegeattgge tgttgtgtaa
cccccttcac tctcagcatc tgtgaacgtg gctcccgagg aggccgtgaa gtagacagag
                                                                     1620
ctggagccag tggagtcact cctctcccgg acaaacggaa accttcgccg ccgagccact
                                                                     1680
                                                                     1740
ctctggttct cttccatgtg gcatctggaa agcaggcccc atcccgaagg gtaccattag
                                                                     1800
gteccateca gettgtettt etgeteacea tggggtgeet ettaetaetg eteeteatta
aagggctaaa agcagagaaa atcctaagtc tctaaccctc aggagggcaa gcagggcagc
                                                                     1860
                                                                     1920
tteetgggee cageeegeae agacagaeta ggttaggeaa acagageget teagetgeta
                                                                     1980
caacagatca accatgagag tccagaagca gcaaggagca tgtgcaaggc gaggtaccaa
                                                                     1989
atgtacagc
```

```
<210> 6018
<211> 3133
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2503)...(531)
<223> similar to gi3777596 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6018
ttttttttt ttgccaagat ccaaagaaaa aattttattt acaatagaga attttatttg
                                                                       60
aaacatgcat ttcttgtttt tttaaaaaca aatcagcaaa tgcagatcaa gtttacactc
                                                                      120
cttaaggcca agagtccccc tatgcacgct gtacatgttc catattaaat cccaaaagct
                                                                      180
                                                                      240
gactcacccc tggggaactt gtgttacaaa ggggcaaggc ccaaggtcag caatggtgtc
ttttatttgg aggaatcaga caatctccct ggatacagga actctgaggg tcaacttgct
                                                                      300
atgaattata ctagggggaa atgcaaaccc aataggccag gaaattctgg ataggtctcc
                                                                      360
                                                                      420
cttaggtacc tggcatacaa tcaaatcaat tttatttagg aaagggaaat acagtaggtg
catacgaaaa agtgaaaaca gaacctggtc catggaactg gaggaacagc agtgtgccga
                                                                      480
                                                                      540
eggteatatt geaegeaaca gttaagteea aaacattegg tteagagtta getttteeee
                                                                      600
attittggcaa tcagttcgtc acaaatcttg gtgagttctt ctatttcttt attcttctgc
tecagegtee tttecaggge gtecaacteg geagetgete etttecgeaa ggetggeetg
                                                                      660
gtgggcggct tgctcctgct gggccttgcc tcgaacctga gcaatcttca gcattggccc
                                                                      720
                                                                      780
tgtccagttt ctcctccage gtgcaccttc agggcctggt acctctgctc ctccttcttc
accogggaca ggtactcotg cgcacatoto ttoaacacot ottoattott goggaagoot
                                                                      840
tetaggacet cetteatett eteatatett etgaagaggt eggeeagaga ettteteeae
                                                                      900
```

```
960
ggagttcagg tcggccaggg gcttgctcct tctccagaac cagctgctgc accgtctggt
ggggagactg acttetetet etgttegtee tetateatet gagegatggt etteteatae
                                                                    1020
teggecacta ttttcctcat ttccatcact tcccgcctgc tttcttcata tttatctttc
                                                                    1080
                                                                    1140
cattetgaga cetetetete ettggttatg atetetgete tggcgatetg gagggcagag
tecaggtegg getgetggaa cagaaggeet geaggtttet ecaceteage ggteeegatg
                                                                    1200
cgggagtaca aggctgtttt ggagatggag acgtctgttg ggtgagcagc ctctctctgg
                                                                    1260
agtttctgag cgaatagtgg ggggttcttt tctgctaagt cgggctccag atagtcaagt
                                                                    1320
gcaccacaga gagagacggg gtgagctagc ctgctgagga gggcgtcagc agaggcaaag
                                                                    1380
gagccetegg gagctgtaat ttcaateget tetgaagggg tgeecaagee catggeetee
                                                                    1440
ageteettet gggaggattt etetggeace tgeaagtgtg aetettggtt aggggeeagt
                                                                    1500
cctcqtqqqa caggatqctq qtttttcqca qcaqtqttca caaqqqcttc aqtctcttca
                                                                    1560
aaacttgacc ctgaacacgg cgtcggggac tctgacatgc ggacgggaga tgacttgaca
                                                                    1620
                                                                    1680
gggctctcct gagaagtgtc aaacataagg tacaaggcct gcttcttcgg ggcatcgtcg
teetgaggta aggaggagee aattttetee atatatteaa ttteatagga gtttetgtaa
                                                                    1740
tccaactcct cagtgggtga actgaatttg gtctcgttta caaaggtgga caggtccgag
                                                                    1800
ggctgcgggt agtcctgttt gtcagcctct aggtccactg tcatgcacgt ccacttctgg
                                                                    1860
ttggtgaccg ccagcttttc ctcatctgtg gcgtggacca ccgcagagat cactggtggt
                                                                    1920
gtttctggtg tagcagctgg ggtggggtcc tgggaaggtg gatcagagag aggagaccgt
                                                                    1980
tttggcgact ttttcaccct aaatgtgtca gtctttaggg gcgtcttctt cttcttggcg
                                                                    2040
ggettgttta geccatecee gtecaeteca ttggetteca tageaetgge tgggatetea
                                                                    2100
aaggaggctg gggatttaga aggtgagctg ggggtcttag aggatgtctt aaaggggtca
                                                                    2160
acggactcat cacaggtgtc tgggtcaaag ttgtatgatt gttggggcag tttgggagac
                                                                    2220
tcctgcattt ttgaggtgga agaaaaaggg ttaaaattgg ggtcatccca cttgtcaata
                                                                    2280
tcaaaggtgt aagtaccttt agcaatgggg atgtcattgg gttcagcagg ggatctggga
                                                                    2340
ggtgaggcag gagtgttgtc aagtttctcg ggtgtctttt tcatctttgg cctcctcagg
                                                                    2400
ggcattttgg caactggctt tttgcctatc tttttggtag gagggggtt ttcctgctgg
                                                                    2460
ttgtcccaac tactcttgtc ctcagaatag tcaaactcca gccttacgga gtgccctttg
                                                                    2520
gctggagagt cctcttgccc cccgctatcc gatggggtta cctcccctgc ctccggggcc
                                                                    2580
gtggtaagag gcagcgtttt cctcccgaca gggggtgagt tctgcactct gccacctcca
                                                                    2640
gaageegggg ggacaacece ttetacacte tetgagteea gagggeagge agetttggge
                                                                    2700
cccgcagcgg gctcaagggg cgtctcctcc aataaggctg ggctaggacc ttccgtcttg
                                                                    2760
gcagattccg ttttcgtctc agatgctaga ttctccccac tggggacaag gctctcttca
                                                                    2820
tetggeteet gttgegtete etteaetggg ggggtetetg tgggtttett ggtggtetgt
                                                                    2880
ttetttttta aggaaggegg eeteggtttt ttagtteget taagggtaet agaageaetg
                                                                    2940
ctggaacccg tgctatatgc atctggggca agggccacgg cctcggggatt gcctgaggaa
                                                                    3000
gaagccccat caaagtcact ggcttgcagg ctgagcgacc gggacagtgt agacttagag
                                                                    3060
atggggacgg aatccgtgga cttcctccgt gtgttcaata agccctcctg attcttagcg
                                                                    3120
tctgaggcac gaa
                                                                    3133
```

```
<210> 6019
<211> 350
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (92)...(338)
<223> similar to gil60379 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6019
agaaqatcaa tqaaactaat qattaqttat tggaaacgqt taccataqqc aaaactttgg
                                                                       60
ttagactgac caagaaaaaa gactgaagat acaaattatc aaaatcggga atgaaagagg
                                                                      120
agacateget cetatecetg cagaaattaa aaggattata agggaataet atgaacaact
                                                                      180
ttatcccatt aaattagaca acttagagga aatgggcaaa atcattgaaa gacataacta
                                                                      240
                                                                      300
ctaaaactca agaagaaata gagaatctga atagagttat actaaataaa gcaattgaat
                                                                      350
tagtaactaa aaatcattct acaaagctca tacccagatg actactctca
     <210> 6020
     <211> 1098
     <212> DNA
    <213> Homo sapiens
```

<220>
<221> misc_feature
<222> (1003)...(424)
<223> similar to gi1911548 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

```
<400> 6020
tttaactccc cctcttctta agagaatttt aatgaagctg agataagagg catatttact
                                                                      60
tgcagtttgc cccattgtta ccctggattc ctccgagcgc acaagcttac cgcaaggctg
                                                                     120
actgtggatg tacttgggaa tetetegteg getgteetea atgeteacqt tettaqeata
                                                                     180
ccttcaccct agagaaaggc ccccacatcg ggcgccagat gaaggggtgg cctgccctc
                                                                     240
cacacctgtg ggtatttcta gtcaggtggg atgagagact gagaaaagaa agaagacaca
                                                                     300
gagacaaagt atagagaaac aacagtgggc ccaggggacc ggcactcagc acaccaagga
                                                                     360
cctgcaccgg caccggcctc tgagttccct cagtttttat tgactattat tttcattatt
                                                                     420
tcagcaaaaa ggaatgtagt aggacagcag ggtgataata aggagaaggt caacaaaaaa
                                                                     480
aacatgtgag caaaagaatc tatatcataa ttaagttcaa gggaaggtac tatgcctgga
                                                                     540
cgtgcacgta ggccagattt atgtttctct ccacccaaac atctcagtgg agtaaagaat
                                                                     600
aacaaggcag cactactgcc aacatgtctc gcctcccgcc acagggcagc ttttctccca
                                                                     660
totcagagtt gaacaaatgt acgatcgggt tttacaccga qacattcagt tcccaqqqqc
                                                                     720
aagcaggaga cagtggcctt cctccatctc aactqcaaqa qqctttcctc ttttactaat
                                                                     780
ccacctcagc acagaccctt tatgggtgtc aggctggggg accatcaggt ctttctcatc
                                                                     840
ccacgaggcc atatttcaga caatcacatg gggagaaacc ttggacaata cqccqctttc
                                                                     900
aagggcaggg ctccctgcgg ctttccacgg tgcattgtgc ccctggttta ttqaqactaq
                                                                     960
agaatggtga tgacttttac caagtatact gcttgcaaat attttgttaa caaggcacgt
                                                                    1020
cctgcacage cctacatece ttaaacettg atttcataca cacatgtttt tgtgagetee
                                                                    1080
aggttgggtc aaagtggt
                                                                    1098
```

```
<210> 6021
<211> 1344
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (502)...(653)
<223> similar to gi5817857 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6021
cccacgegtc cgtggggagg aagtctccac ccctgggagg ctgaagccag gcatagcgcg
                                                                       60
                                                                      120
ctggctagga ctccagtacc gtgaagggag gcagtgagag caaacatctg tgcctcattc
ctgatctcaa ggggaaagca agaacaacac ctgtgaaggg aaggagggtg gatcggcctg
                                                                      180
actggccctg ggaagcacag aggagcctac tgggaccagg gaagagactg acaaqaqaaq
                                                                      240
ggaggcctgt ccctgcctgc ttctgtctca agaagattgt tatcacttcc tctggtgaaa
                                                                      300
tectgeette etgteeceae ggeeeeteag etgatgeeae ettaetetgg agaggatggg
                                                                      360
cagageetee tatggaggga geeetgtggg teaccaaage tecagtgace acceeeggge
                                                                      420
aaagacctgc agatcccctg ttagagacgg gcccaggact ttgtgcgggg tgcccactgt
                                                                      480
tgetetgage etteaettee teagggagge tteeteagga tetegaacet geggaaggag
                                                                      540
gaccagtetg tgtacttetg ccaagtecag etggacatac agatcaggga ggetgtegtg
                                                                      600
geagtecate aaggggacce accteaceat cacceaqqqt qaqtecaqet qeectqqcae
                                                                      660
caaggaacct tcctggttca gccataggct caggtgtgtg gagggaatga cctgaggggc
                                                                      720
tgtatgaggg aacaacctcc tggggctccc ctatgcctga gttcctgcaa ctcagaagtt
                                                                      780
gaggeccaga gatecaggta gagggggete cagteetggg actgeeetge aagteatgtg
                                                                      840
gcctgggaca gggcttctcc aagctctgtc ccctcctgtg tagggcaggg aggtcagagg
                                                                      900
ggaccetgca gatecagtet catgtetggg ggtcaagggg tggcetcgag agggaccagt
                                                                      960
ctctgtgtag gggaccgtca gccccctcac cccttgagca agactgtggt ccctgcacca
                                                                     1020
agggagcagg cctggggtgg gaagaggcca gctgggctgt ggtggtgcct ggggactgca
                                                                     1080
tgggagcccc tgccagggag ggagagggac agaggacaag ctgggggctc tggtgcttgg
                                                                     1140
getggggget gagegeetgt gaceteeact ggetteetee tteteetete tgaggaetga
                                                                     1200
atctggggtg cagcagagca cagactcagg cccgcctttc ctctccctga aagagcctgc
                                                                     1260
gctggccttg gacagagaaa gggatgagaa gtgaggctga gtgcggtggg gtctgcaggg
                                                                     1320
atccaggtgg gaggggccca gccc
                                                                     1344
```

```
<210> 6022
<211> 2075
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2076)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (510)...(1869)
<223> similar to gi4929553 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6022

```
gggtctcaga tgaaaagatg tacatggtga atgataggtc caggactttt ccccctctcc
                                                                     60
tgacttgtgg tccagcccct cccgcaccca ccttatctcc cacattcctc cttggggaat
                                                                    120
aacatggagg acagatettt teetgtggee tgaggtggee tgggggacage aaacagaett
                                                                    180
cccatctgcc tttgtccttt cctgcttcca caggtggtcc aaaccagccc tcgtcactcc
                                                                    240
ccacaccacg tggttaggtg ggtagacccc acagccctgt gtgaggagct tctgcttcca
                                                                    300
                                                                    360
ctggagaacc cgtgtcaggg cagggcccgc ttgctgctca caggcctcca cgcctgtggg
gatetgagtg ttgccttgcn gagacacttc tcctgctgtc ctgaggtggt ggccctggct
                                                                    420
cagtgggctg ctgctacatg aagctgagtg accctggcgg ctacccactg agtcagtggg
                                                                    480
tggctgggct gcctggctat gaactgccct accgttccat cttggatgcc tacatcatcg
                                                                    540
aatttttcac agacaaccta tgggacacac tcccttgctc atggcaggaa gcattggatg
                                                                    600
gactgaaacc accacagctg gccacaatgc tgctggggat gcctggggaa ggggaggtcg
                                                                    660
tcaggtacag gtcagtgtgg ccactcaccc tgctggccct gaagtccacg gcgtgtgccc
                                                                    720
tggcctttac ccggatgcct ggctttcaga ccccctcaga attcctggag aaccccagcc
                                                                    780
agageteeeg aetaacaget eeatteegga aacatgteag geecaagaag cageatgaga
                                                                    840
teeggagget gggagagttg gtgaagaage tgagtgattt cacaggetge acceaggttg
                                                                    900
tagacgtggg ctcaggccag ggccatctct cccgcttcat ggctcttggc ctggggttga
                                                                    960
tggtgaagag catcgaaggg gatcagagac tggtggagag agcccagcgc ctggaccagg
                                                                   1020
agettetgea ggetetggag aaagaggaga agaggaacce geaggtggte caaaccagee
                                                                   1080
ctcgtcactc cccacaccac gtggttaggt gggtagaccc cacagccctg tgtqaqqaqc
                                                                   1140
ttetgettee actggagaac cegtgteagg geagggeeeg ettgetgete acaggeetee
                                                                   1200
acgectgtgg ggatetgagt gttgcettge tgagacaett etectgetgt eetgaggtgg
                                                                   1260
tggccctggc ctcagtgggc tgctgctaca tgaagctgag tgaccctggc ggctacccac
                                                                   1320
tgagtcagtg ggtggctggg ctgcctggct atgaactgcc ctaccggctt cgggaggggg
                                                                   1380
cctgccatgc cctggaggaa tatgctgagc ggctacagaa agctggccct ggccttcgaa
                                                                   1440
1500
ggccaggcgt gcagggtatc cccagggtcc acgagctcaa gattgaagaa tatgtgcagc
                                                                   1560
gggggctaca gcgagtgggg ctagatcccc agctgccact gaatctggct gcccttcagg
                                                                   1620
cccacctggc ccaggagaac cgtgtggtgg ccttcttcag cctggctcta ctgcttgccc
                                                                   1680
cactggtgga gacgcttatt ctactggacc ggctgctgta ccttcaggaa caggcccttt
                                                                   1740
ctcccaggtt tccatgctga gctcctgccc atcttcagtc ctgaactctc tcccagaaac
                                                                   1800
ctggttctgg tggccaccaa gatgcccctg ggtcaggctc tttctgttct ggagactgaa
                                                                   1860
gacagetgat geageetgag gagacatete agaceecate atetgaaagt geecagagag
                                                                   1920
cacagtggca gagtacatct catccagaga aacagcatcc tgcatcctcc agagtcctgg
                                                                   1980
ttccttcagt ttcatcccct ttctctcctt ccatggatta tgtaatacat tgtaaagttt
                                                                   2040
taattaatta aaaattggat atctgaaaaa aaaaa
                                                                   2075
```

```
<210> 6023
<211> 6309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (74)...(5427)
<223> similar to gi5911999 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6023
gattgtttga atttgaaaac ggtaacatcg cagtgctgct cgcgggtctg gctagtcagg 60
cgaagtttgc agaatggaat ctaattttaa tcaagaggga gtacctcgac catcttatgt 120
```

```
ttttagtgct gacccaattg caaggccttc agaaataaat ttcgatggca ttaagcttga
                                                                      180
tetgteteat gaatttteet tagttgetee aaatactgag geaaacagtt tegaatetaa
                                                                      240
agattatete caggtttgte ttegaataag accatttaca cagtcagaaa aagaaettga
                                                                      300
                                                                      360
gtctgagggc tgtgtgcata ttctggattc acagactgtt gtgctgaaag agcctcaatg
                                                                      420
catccttggt cggttaagtg aaaaaagctc aggggcagat gggcacagaa attcagtttt
                                                                      480
ttcccaggtt ttttgggccc agcaactaca cagaaggaat tctttcaggg ttgcattatg
caccccagta aaagacctct tgaaaggaca gagtcgtctg atttttactt acgggctaac
                                                                      540
caattcagga aaaacatata catttcaagg gacagaagaa aatattcgca ttctgcctcg
                                                                      600
aactttgaat gtattatttg atagtcttca agaaagactg tatacaaaga tgaaccttaa
                                                                      660
                                                                      720
accacataga tecagagaat aettaaggtt atcateagaa caagagaaag aagaaattge
tagcaaaagt gcattgcttc ggcaaattaa agaggttact gtgcataatg atagtgatga
                                                                      780
tactctttat ggaagtttaa ctaactcttt gaatatctca gagtttgaag aatccataaa
                                                                      840
agattatgaa caagccaact tgaatatggc taatagtata aaattttctg tgtgggtttc
                                                                      900
tttctttgaa atttacaatg aatatattta tgacttattt gttcctgtat catctaaatt
                                                                      960
ccaaaagaga aagatgctgc gcctttccca agacgtaaag ggctattctt ttataaaaga
                                                                     1020
tctacaatgg attcaagtat ctgattccaa agaagcctat agacttttaa aactaggaat
                                                                     1080
aaagcaccag agtgttgcct tcacaaaatt gaataatgct tccagtagaa gtcacagcat
                                                                     1140
attcactgtt aaaatattac agattgaaga ttctgaaatg tctcgtgtaa ttcgagtcag
                                                                     1200
tgaattatct ttatgtgatc ttgctggttc agaacgaact atgaagacac agaatgaagg
                                                                     1260
tgaaaggtta agagagactg ggaatatcaa cacttettta ttgaetetgg gaaagtgtat
                                                                     1320
taacgtcttg aagaatagtg aaaagtcaaa gtttcaacag catgtgcctt tccgggaaag
                                                                     1380
taaactgact cactattttc aagttttttt aatggtaaag ggaaaatttg tatgattgtc
                                                                     1440
aatatcagcc aatgttattt agcctatgat gaaacactca atgtattgaa gttctccqcc
                                                                     1500
attgcacaaa aagtttgtgt cccagacact ttaaattcct ctcaagagaa attatttgga
                                                                     1560
cctgtcaaat cttctcaaga tgtatcacta gacagtaatt caaacagtaa aatattaaat
                                                                     1620
gtaaaaagag ccaccatttc atgggaaaat agtctagaag atttgatgga agacgaggat
                                                                     1680
ttggttgagg agctagaaaa cgctgaagaa actgaagatt aggggaaact aaacttcttg
                                                                     1740
atgaagatet agataaaaca ttagaggaaa ataaggettt eattageeac gaggagaaaa
                                                                     1800
gaaaactgtt ggacttaata gaagacttga aaaaaaaact gataaatgaa aaaaaggaaa
                                                                     1860
aattaacctt ggaatttaaa attcgagaag aagttacaca ggagtttact cagtattggg
                                                                     1920
ctcaacggga agctgacttt aaggagactc tgcttcaaga acgagagata ttagaagaaa
                                                                     1980
atgctgaacg tcgtttggct atcttcaagg atttggttgg taaatgtgac actcgagaag
                                                                     2040
aagcagcgaa agacatttgt gccacaaaag ttgaaactga agaagctact gcttgtttag
                                                                     2100
aactaaagtt taatcaaatt aaagctgaat tagctaaaac caaaggagaa ttaatcaaaa
                                                                     2160
ccaaagaaga gttaaaaaag agagaaaatg aatcagattc attgattcaa gagcttgaga
                                                                     2220
catctaataa gaaaataatt acacagaatc aaagaattaa agaattgata aatataattg
                                                                     2280
atcaaaaaga agatactatc aacgaatttc agaacctaaa gtctcatatg gaaaacacat
                                                                     2340
ttaaatgcaa tgacaaggct gatacatctt ctttaataat aaacaataaa ttgatttgta
                                                                     2400
atgaaacagt tgaagtacct aaggacagca aatctaaaat ctgttcagaa agaaaaagag
                                                                     2460
taaatgaaaa tgaacttcag caagatgaac caccagcaaa gaaagggtct atccatgtta
                                                                     2520
gttcagctat cactgaagac caaaagaaaa gtgaagaagt gcgaccgaac attgcagaaa
                                                                     2580
ttgaagacat cagagtttta caagaaaata atgaaggact gagagcattt ttactcacta
                                                                     2640
ttgagaatga acttaaaaat gaaaaggaag aaaaagcaga attaaataaa cagattgttc
                                                                     2700
attttcagca ggaactttct ctttctgaaa aaaagaattt aactttaagt aaagaggtcc
                                                                     2760
aacaaattca gtcaaattat gatattgcaa ttgctgaatt acatgtgcag aaaagtaaaa
                                                                     2820
atcaagaaca ggaggaaaag atcatgaaat tgtcaaatga gatagaaact gctacaagaa
                                                                     2880
gcattacaaa taatgtttca caaataaaat taatgcacac gaaaatagac gaactacgta
                                                                     2940
ctcttgattc agtttctcag atttcaaaca tagatttgct caatctcagg gatctgtcaa
                                                                     3000
atggttctga ggaggataat ttgccaaata cacagttaga ccttttaggt aatgattatt
                                                                     3060
tggtaagtaa gcaagttaaa gaatatcgaa ttcaagaacc caatagggaa aattctttcc
                                                                     3120
actctagtat tgaagctatt tgggaagaat gtaaagagat tgtgaaggcc tcttccaaaa
                                                                     3180
aaagtcatca gattgaggaa ctggaacaac aaattgaaaa attgcaggca gaagtaaaag
                                                                     3240
gctataagga tgaaaacaat agactaaagg agaaggagca taaaaaccaa gatgacctac
                                                                     3300
taaaagaaaa agaaactctt atacagcagc tgaaagaaga attgcaagaa aaaaatgtta
                                                                     3360
ctcttgatgt tcaaatacag catgtagttg aaggaaagag agcgctttca gaacttacac
                                                                     3420
aaggtgttac ttgctataag gcaaaaataa aggaacttga aacaatttta gagactcaga
                                                                     3480
aagttgaacg tagtcattca gccaagttag aacaagacat tttggaaaag gaatctatca
                                                                     3540
```

```
tcttaaagct agaaagaaat ttgaaggaat ttcaagaaca tcttcaggat tctgtcaaaa
                                                                     3600
acaccaaaga tttaaatgta aaggaactca agctgaaaga agaaatcaca cagttaacaa
                                                                     3660
                                                                     3720
ataatttqca agatatgaag catttacttc aattaaaaga agaagaagaa gaaaccaaca
ggcaagaaac agaaaaattg aaagaggaac tetetgcaag etetgetegt acccagaate
                                                                     3780
                                                                     3840
ctgaacgcag atcttcagag gaaggaagaa gattatgctg acctgaaaga gaaactgact
                                                                     3900
gatgccaaaa agcagattaa gcaagtacag aaagaggtat ctgtaatgcg tgatgaggat
aaattactga ggattaaaat taatgaactg gagaaaaaga aaaaccagtg ttctcaggaa
                                                                     3960
ttagatatga agcagcggaa ccattcagca actcaaggag cagttaatta atcagaaagt
                                                                     4020
                                                                     4080
ggaagaagct atacaacagt atgagagagc atgcaaagat ctaaatgtta aagagaaaat
aattgaagac atgcgaatga cactagaaga acaggaacaa actcaggtag aacaggatca
                                                                     4140
aqtqcttqqa qqctaaattq qaqqaaqttq aaagqctqqc cacaqaattq qacaqatqqa
                                                                     4200
gggtaaaatg caatgatttg gaaaccaaaa acaatcaaag gtcaaataaa gaacatgaga
                                                                     4260
acaacacaqa tgtgcttgga aagctcacta atcttcaaga tgagttacag gagtctgaac
                                                                     4320
agaaatataa tgctgataga aagaaatggt tagaagaaaa aatgatgctt atcactcaag
                                                                     4380
cgaaagaagc agagaatata cgaaataaag agatgaaaaa atatgctgag gacagggagc
                                                                     4440
gtttttttaa gcaacagaat gaaatggaaa tactgacagc ccagctgaca gagaaagata
                                                                     4500
gtgaccttca aaagtggcga gaagaacgag atcaactggt tgcagcttta gaaatacagc
                                                                     4560
taaaagcact gatatccagt aatgtacaga aagataatga aattgaacaa ctaaaaagga
                                                                     4620
tcatatcaga gacttctaaa atagaaacac aaatcatgga tatcaagccc aaacgtatta
                                                                     4680
gttcagcaga tcctgacaaa cttcaaactg aacctctatc gacaagtttt gaaatttcca
                                                                     4740
                                                                     4800
gaaataaaat agaggatgga tctgtagtcc ttgactcttg tgaagtgtca acagaaaatg
atcaaagcac tegattteca aaacetgagt tagagattea atttacacet ttacagecaa
                                                                     4860
acaaaatggc agtgaaacac cctggttgta ccacaccagt gacagttaag attcccaagg
                                                                     4920
ctcggaagag gaagagtaat gaaatggagg aggacttggt gaaatgtgaa aataagaaga
                                                                     4980
atgctacacc cagaactaat ttgaaatttc ctatttcaga tgatagaaat tcttctgtca
                                                                     5040
aaaaggaaca aaaggttgcc atacgtccat catctaagaa aacatattct ttacggagtc
                                                                     5100
                                                                     5160
aggcatccat aattggtgta aacctggcca ctaagaaaaa agaaggaaca ctacagaaat
ttggagactt cttacaacat tctccctcaa ttcttcaatc aaaagcaaag aagataattg
                                                                     5220
aaacaatgag ctcttcaaag ctctcaaatg tagaagcaag taaagaaaat gtgtctcaac
                                                                     5280
caaaacgagc caaacggaaa ttatacacaa gtgaaatttc atctcctatt gatatatcag
                                                                     5340
                                                                     5400
gccaagtgat tttaatggac cagaaaatga aggagagtga tcaccagatt atcaaacgac
                                                                     5460
gacttcgaac aaaaacagcc aaataaatca cttatggaaa tgtttaatat aaattttata
gtcatagtca ttggaacttg catcctgtat tgtaaatata aatgtatata ttatgcatta
                                                                     5520
aatcactctg catatagatt gctgttttat acatagtata attttaattc aataaatgag
                                                                     5580
tcaaaatttg tatattttta taaggetttt ttataatage ttetttcaaa etgtatttee
                                                                     5640
ctattatete acacattgga teagtgaaga teetaggaaa gaggetgtta tteteattta
                                                                     5700
ttttgctata caggatgtaa taggtcaggt atttggttta cttatattta acaatgtctt
                                                                     5760
atgaattttt tttactttat ctgttataca actgatttta catatctgtt tggattatag
                                                                     5820
ctaggatttg gagaataagt gtgtacagat cacaaaacat gtatatacat tatttagaaa
                                                                     5880
agateteaag tetttaatta gaatgtetea ettattttgt aaacattttg tgggtacata
                                                                     5940
ggacatgtat atatttacgg ggtatgtgag atgttttgac acaggcatgc aatgtgaaat
                                                                     6000
acctqtatca tqqaqaatqa qqtatccatc ccctcaaqca tttttccttt qaattacaqa
                                                                     6060
taatccaatt acattcttta gatcatttaa aaatatacaa gtaagttatt attgattata
                                                                     6120
gtcactctat tgtgctatca gatattaaat cattcttttt atcttatttg tttttgtacc
                                                                     6180
cattaaccat ccccacctcc ccctqcaacc qtcaqtaccc ttaccaqcca ctqqtaacca
                                                                     6240
ttettetaet etgtatgece atgaggteaa ttgattttat ttttagatee cataaatteg
                                                                     6300
acgcggccg
                                                                     6309
```

<210> 6024

<211> 3888

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (3725)...(1430)
<223> similar to gi5327054 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6024 ttttttttt ttaattttca cattttattt ccaactattg cagtaacaag atgccggtag 60 tattctgcac tgaaagtggc aaccttttaa agtaaacaag gttgcaaatt ttagtattcc 120 aacaatattt tgacctatgg agattttgat aggaaagaat tattacaatc agttttataa 180 tactacagac ttatgtttcc tcccatatct aggaataaaa atatccaccc tcccctcaat 240 gattaatcat gtacacatct ttactcttta caagcactat ccttccaagt tgtactatga 300 ggggaaatcc ctcctcactc ctgggttttt ctacagtata cagaaatagc agtcacttta 360 gcagtaatgt acaatactat tcaatcttta gttgaaaaat aaagaagtgg gattgcccta 420 tttatgtcct gatagtaaaa agacacacac cattgaaaca taaaacgagt caacaaactt 480 ctatttttat tgacaggagt ccaaaatgaa tacaaaaaaa agcttccttt gcatgttata 540 600 cttactttcc ttaaaaagct cctgatagag tcaagtagac tgaaaactac ggatgtagtt cagcttttag agtgaacctt ttttaaaaaa ggtttaataa cataagccac cagtatcaga 660 aaacatacag tcccactatc acttttagag ctagaactta tcaaaagaat tagatccctg 720 cattgatctg ctaagataga ggtttagaaa ttggtttaag ccattaaaag ccattttat 780 aatctgtctg ataactctgg ggcaattaag gaaaagggaa attccaaaac gtaggccctc 840 tattatcctg tgggaatgtg agtagaatgc caactttatg accaagaata agtaaaatta 900 aaagtttaaa atctatgcag tggagtctgt tgtatcactg caaaatggtc cacaacagag 960 cttatccagg ggattatcca cttgagcgat gttacttaaa ccttggggcg atgttacctt 1020 aaaccatatt tgtggtgttt gctaaaaact aaggctgaac aaggaaaagt cgctccattt 1080 acagactgtg tttccctgca tctttacttt tactgggacc atagactgat cagataatac 1140 atageceaac aettetggae agttataata acaaaggatt tattateatt tgeagatgaa 1200 ataaatgtac catcccctac ttgaaaggtt tcaataagcc ttaacatttt tcaggttgta 1260 ccaaggcacc gccactgcct agttatatta tgcacccatt tctagagtaa aaaaactaca 1320 ceteceteaa cateagttet gtactgttte tgggtttatg atacaettee aaaacagcaa 1380 aaaattgcaa atatgtgcaa acactgtggt ccattcagga gtactgctta gtcatcatct tettetteet eetettette eteaaageta tetteaaage eeteaetgte eteetggtet 1500 tcatccccct ctattgctgt atcccactgt gggtgatttt ctggcacagg cttagcctca 1560 tgaacttcca acttcaatgg tttaatctga tccaaaccca tataggagtc tgatctcaga 1620 aacacagtat actgataatt tccaggcttg cctggtgcag gaaacttcag ctctacctcc 1680 tetgtatett teagegtaca cacatgatat ggcatggata ttaatgtetg etectteeta 1740 totgoaatgt aaagccacca coattottgt ttttcctcag gaaagtaaag gotatacaca 1800 ggatgtgtta tttttgattt ggtttccaat agagctctct cttttcgctg tatgctttgt 1860 tgtaattett gecaetetge tteateatet ttgttttgtt ttteatettg etetetatea 1920 gagtetetgt cactaceate atetttetea etttgggaat etetattggt ttettettet 1980 tcagaatcac tgcccttatc tgaaacttct tcttcatctt cctttactgc agcttcattc 2040 ccaacgactc catttgcctg cttttgtttc tgttgctttg actgtggtaa tagcccaggg 2100 gtaggttttt tttttaaagg tttcttttt tttgatttag cagttttctt gggtccttta 2160 ctcttctgtt gccatcctcc ttttgtcctg ttcttgttag tttcaccctg cccatcttct 2220 getggetgtt cetetgeage acagatggae tgeteetttt caaataette agecattgtt 2280 tgccttgtca acttaaccaa cactgtaact aaggatccta ctgtgatgtt gttgctatct 2340 tcatcatcta acacctgtga ttttatatcc atggtcacat atggaaaact cccaaggaca 2400 gccataacct cttcatattt ttcatcttca aggaagtgca gtagagtgtg acgatctgat 2460 tettttaaac teaceaaate etggatagtt ttaattttat acttettatq attaqaaace 2520 cgtctaagat tgtcctcttc aatatgaggg gagcctgcag aagggggaga ctttaaattg 2580 ctgaagtccc tgaacgggcc atctgagaaa ggttcaatgc aggttttcta gggatgccaa 2640 agttggagca cgaaactccc tttcttcacg gttccgggcc attactaatt agttggcaga 2700 ttacattaac catttettga agtagggcag gacacttttt ttagcatgaa ttgetgatet 2760 tcttcaaggg tctcaggaat tttcattcta gcaagatgag acagtaaaag aactctggcc 2820

```
ttcaggctat atgggcaggt aagtggaggc tcattcttct ttaaattaat gctgccaatt
                                                                     2880
tetetgatta getgtggtat tagaatatta tetegttggt etgettgtgg catetttatt
                                                                     2940
                                                                     3000
atactgagga tcaaattcag aagctccagc caaaaccatg ataagacgtt tcatatccat
atttegggtt ttataaacaa agtatgtata aatetgtgtt gtgegtatta gaatetggte
                                                                     3060
                                                                     3120
tecaetatag egtattgage gataceaeca agageecaca acaaetggaa ggataaecat
aaatgccaat ccatatacaa gtaaaaccag aattgaattt ttctggtcaa ctatccaagc
                                                                     3180
tggcagggca attccaaagc ttgtggcttg aggcccatct ggatttccaa attcttccca
                                                                     3240
atttttcccg ggactettca teegttaaag geageataag eetttgetat eeteatgaae
                                                                     3300
ataacctcat cacctccttt atctggatga tatttaagtg acagcaaacg atattgtttt
                                                                     3360
ttaatttctg ctactgtggc tccaggatcc aaatttaata cttcataagg attgtattct
                                                                     3420
tggtattctc ggtctgtttt ggaaacttta tatgcaagga ataagaacaa tgcccatcct
                                                                     3480
gcaagcagaa ctattttctt tactgtagga ataatatttg gctggggttt taataaccgt
                                                                     3540
aaacgatacc acatacacct tecatatact tttetgatat tetttaateg aatttgeteg
                                                                     3600
gcattctgat ctcggggcca gaggtagtat gtcgccggga tcacgatgag ccccacgaag
                                                                     3660
gaggtgagga agtagaagaa ggtgttccca ctgtcatcgt actggaactg ctgcccggcc
                                                                     3720
atggcacccc ctcctccgcc tcgctcttct caccgccgcc gccacgacca cgctctgcac
                                                                     3780
tecegetece aaegeeeeag eeegagtgge gtagettgga caetgeegee geegeetete
                                                                     3840
ctccccgccc ccacgccact ctcacggaca cgccgcacga aatcgtcg
                                                                     3888
```

```
<210> 6025
<211> 2373
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (201)...(1666)
<223> similar to gi498721 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6025 ggccttgggg ctttgtgaga tagctagggt cgacttgtgt ggattctagt agaacggagc 60 tgaccetate egaacaggee cetgecetge ttggatagag geeteegaac aggagtaaag 120 aatggctgtt gaacatccac aaggcacctg caagactatg aatcaaagtt gagaccaaga 180 aattatttct gaaaaaggat atggaaaacc ttacaaaaca cagcattgag tgttcaagtt 240 tcagaggtga ttgggaatgt aaaaaccagt ttgagagaaa acagggatct caggaaggac 300 atttcagtga aatgatattt actcctgaag acatgcccac tttcagtatc cagcatcaga 360 gaattcatac tgatgagaaa ctccttgaat gtaaggaatg tgggaaggat tttagttttg 420 tatcagtcct tgttcgacat cagcgaattc atactggtga gaacacctta tgaatgcaaa 480 gaatgtggca aggcctttgg tagtggtgca aaccttgctt accatcaaag aattcatact 540 ggtgagaagc cttttgaatg taaagaatgt gggaaggcct ttggtagtgg ctcaaacctt 600 actcaccatc agagaattca tactggtgag aaaccctatg agtgtaagga atgtgggaaa 660 720 tatgagtgta aggaatgtgg gaagtccttt atttttgaat cagcccttat tcggcatcac 780 agaattcaca caggtgagaa accttatgaa tgtatagatt gtggtaaagc ctttggcagt 840 ggttcaaacc ttactcaaca tcggcggatt catactggtg agaaacctta tgaatgcaaa 900 gcatgtggaa tggcctttag cagtggttcg gctcttactc ggcatcagag aattcatacc 960 ggtgagaaac catatatatg taatgaatgt ggtaaggcct ttagttttgg atcagccctt 1020 actcgacatc aaagaattca tactggtgag aaaccttatg tatgtaagga atgtgggaag 1080 gcttttaata gtggctcaga tctcactcag catcagagaa ttcacactgg tgagaaaccc 1140

```
1200
tatgagtgta aggagtgtga gaaagcettt agaagtggtt caaaacttat tcagcatcaa
                                                                     1260
agaatgcata ctggagagaa accttatgaa tgtaaggaat gtgggaagac ctttagtagt
ggttcagacc ttactcaaca tcacagaatt catactggtg agaaacccta tgaatgtaag
                                                                     1320
gaatgtggga aggcctttgg tagtggctca aaacttatcc aacaccagct aatccatact
                                                                     1380
ggtgaaagac cctatgaatg taaagaatgt ggaaagtcct ttagtagtgg gtcagctctt
                                                                     1440
                                                                     1500
aatcggcacc agagaataca cactggtgag aaaccctatg aatgtaagga gtgtggggaag
getttttata gtggetcaag eettaeteag eateagagaa tteataeagg tgagaaaett
                                                                     1560
tatgaatgta agaactgtgg gaaggcttat gggagggatt cagagtttca gcaacataag
                                                                     1620
                                                                     1680
aaaagtcata atggtaagaa actctgcgaa ttggaaacta taaattgaaa ttatgtgctg
                                                                     1740
aaggaaggac tctaaacata tgacttaaga aaattcatag tggtgaaaat ctctacaaat
agaactaagg tacaaatgcc ttacttatgc ttcacaggtt agtcagtcta agaatattta
                                                                     1800
tacaggaaaa aaatcacccc aaataaaata aatatttgaa gatccttatc tatattcatt
                                                                     1860
ccttcattac ttttggaaaa ttcttacttg tgaatgttaa aaatgaaaaa aaaatcattt
                                                                     1920
attatatttt gcctcaactt taaacattgg aaaactcatt tctgggttaa tcctactata
                                                                     1980
ttttttcaat ggtctttttt ttttgtatta tacaaaatta ctgattcatt gaaaaattat
                                                                     2040
tttatttatt gcaagectaa atttateett tttttettte etgattatee taacaceatt
                                                                     2100
tattcaataa ccttgtccat tttcatattt tttttattga ctatttgatg gtaagttaca
                                                                     2160
tttttattca cataaagctt ggatatcagg tcagggtttt tttgtttttg ttttgtttt
                                                                     2220
tgtttttttg agatggagtc tcactgtcac caggetggag tgcagggggg caatctcggt
                                                                     2280
teactgeaac etecacetee egagtteaag tgatttteet geeteagete eecagtaget
                                                                     2340
gggactacag gcgcccgcca ccacgcccag ctt
                                                                     2373
```

```
<210> 6026
<211> 851
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (65)...(435)
<223> similar to gil340174 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6026
tttttttttt ttgcaggtgc atttgtttct ttatttaaaa aaatcatctg ggggcatggt
                                                                       60
ctgaggagga cacccetece atggetttgg ggaggaegea ggttecagga gteacaggge
                                                                      120
agaaacacgc ggggtgggtg ggggcgtggc cggagtgggg aggggctgtg cccccagcac
                                                                      180
ctgggggtgg ctcccacggc accaggtggg ctagggcaac agtatgtaca ggcgagcagt
                                                                      240
gctcctggac ccggtcgggg ccggctgggg ccccattctg cggcagggga gctctggggc
                                                                      300
acagggtetg agteceatet tgggetgeag ggacegegag ggeegteeag ggaggetgga
                                                                      360
cagcgggggc ctttatctgg gcccatcagg tggatgagaa cggacactgc aaaccgctca
                                                                      420
ccacctgggc cagggctagg cctatccggc aggggccgtc cccacactga atcctgcgtg
                                                                      480
cgcagaactc aagccggcat ccaggcagtg ggaacgcccc gcaggctggg cttgggtggc
                                                                      540
ctcgggcacg tgacaggtgg ggcccgtgtc ctgataaacg gacaggaaca aaaggaacgc
                                                                      600
aaggtetggg acceaegget etgggageag egecaeeeag getggeteet ggeagagaaa
                                                                      660
tgggaatcgc aaatgcattg caatgtgcag tgaagagacg cgagggacgc ccgcggcgca
                                                                      720
ccgccggcag acgacgtggg caggcgccct gagctgcggg tccgtgggcc ctggcccagg
                                                                      780
ceggeacage cetgteecta gteetgaggg attgteteca caeggeetgg ceaetggeet
                                                                      840
ggccacctcc c
                                                                      851
```

```
<210> 6027
<211> 5225
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (165)...(4295)
<223> similar to gi4884564 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6027 tttcgtggga gggaacgctc caggtaaagc gctgggggag gaagcgacgc cgaggagcta 60 eggttteete cagaggtete egeceetetg eccetatatt eccagagete gagtetgate 120 egggeettge egggeaceet ggaaaggegg gggtgatagt acagatggag acgeaactge 180 agagcatttt cgaagaggtg gtgaaaacgg aagttataga agaggctttt cctggcatgt 240 ttatggatac tcctgaagat gagaaaacaa aactaattag ctgtttgggg gccttcagac 300 agttttgggg tggtctttct caggagtctc atgaacagtg tatccagtgg attgttaagt 360 420 cagttgagac tggtctcctt ccacccaggc tggtttgtga atccctgata aactctgaca 480 ctcttgagtg ggaaagaaca cagctttggg ccttaacatt taaactggtt cggaaaataa 540 600 ttgggggagt ggattacaag ggtgttcgag atctcttaaa agtgattttg gagaagattt 660 tgacaattcc taatacagtg agetetgetg ttgtacagca gettetggca geaagagagg 720 ttatagcata tatcttggaa agaaatgcct gcttattacc agcctatttt gcagtcactg 780 agatcaggaa actgtatcct gaaggcaaac ttccacactg gttacttgga aacctagtat 840 cagacgttgt ggataccttc aggcccacag caaggataaa ctccatttgt ggtcgctgta 900 gtcttctgcc agaagtaaat aattcgggtg ccatttgtaa ttcatggaga actggatcct 960 getactette gtttteettt gaaaggeegt tttgeeaata tgataagega tetgtttgaa 1020 ccacagactg ctttgttgag gatatgtatt ggagcagcct tattccaggg atatggtctg 1080 caatatgcta ggtttaaata agcagacctt gaacattgct cagcacaagc agcgctgccc tgtgctggag gaccagttgg tggatctggt tgtttatgcc atggagcgat ctgagaccga 1140 1200 ggagaagttt gacgatgggg gaacaagcca actcctgtgg cagcatctct caagtcagct cattttcttt gtgcttttcc agtttgcaag ttttccacat atggtgcttt ctcttcatca 1260 1320 gaagttagca gggcgaggac tgattaaagg cagagatcat cttatgtggg ttctcctgca attcatttct ggaagtattc agaaaaatgc actagctgat tttctccctg tgatgaagct 1380 cttcgacttg ctatacccag aaaaagaata tatcccagtt cctgatatta acaaacccca 1440 gtcaacccat gcctttgcaa tgacctgtat ttggattcat ctcaatagaa aagctcaaaa 1500 1560 tgacaactcc aagctacaga ttccaatacc tcattcccta agacttcacc atgagttcct gcagcagagt ctaagaaata aaagtttaca gatgaatgac tataagattg ctctattgtg 1620 taatgcatac tctacaaatt cagaatgttt tacattaccc atgggagctc tggtagaaac 1680 tatttatgga aatggaatta tgaggatacc tctccctgga acaaactgta tggcttcagg 1740 atctattacc cccttaccta tgaacctcct ggattcactg acagttcatg ccaaaatgag 1800 cettatteae ageattgeaa eeagggtgat aaaaettget catgeaaagt eeagtgtgge 1860 cttggctcca gccctagtgg aaacttacag tcgtttattg gtctatatgg aaatagagtc 1920 tttgggcatc aaaggattta tcagtcagct tttgccaact gttttcaaat cacatgcatg 1980 ggggatetta cacacactee ttgagatgtt tagetacegg atgeateata tteageetea 2040 ttacagagtt cagctcctga gtcatcttca tactttggct gcagttgcac aaacaaacca 2100 gaaccagete catettigtg tegagageae tgeteteagg ettataacag cattaggtag 2160 ctcagaggta caaccgcagt ttacacgctt ccttagtgat cccaaaacag tgctctcagc 2220 agaatctgaa gaactgaacc gagccttgat attgaccttg gctagagcaa ctcatgtaac 2280

agatttttt	acaggctctg	attcaattca	gggaacttgg	tgtaaagaca	tacttcagac	2340
				ctgagctgtt		2400
actacaggca	ttcttcaaac	aaaataatgt	gcctcaggaa	agccgtttta	atctgaaaaa	2460
				aacgaaaacg		2520
ccacttctct	atgcagggct	cccctcctct	ctttctttgt	cttctctgga	aaatgctctt	2580
ggaaacagat	catattaatc	agattggcta	tagagtatta	gagagaattg	gagccagggc	2640
cttggtagcc	catgtgagga	catttgcaga	tttcctggta	tatgagtttt	ctacatcagc	2700
agggggtcag	caactcaata	aatgcattga	aattcttaat	gacatggtat	ggaagtataa	2760
cattgttaca	ctggacagat	taattctctg	cctggccatg	cgtagtcacg	aaggaaatga	2820
agcccaggtt	tgttatttca	taattcagtt	gctgttactc	aaaccaaacg	attttagaaa	2880
tcgagtaagt	gactttgtga	aggaaaattc	cccagagcac	tggttacaga	atgactggca	2940
caccaagcac	atgaattatc	acaagaaata	tccagagaag	ttgtattttg	agggcctcgc	3000
ggaacaggtg	gatcctccct	gtacagatcc	agtctcccta	tctgcccatc	tattttggga	3060
atgtgtgtct	tcgattcctt	ccagtatttg	atatagtaat	ccacagattt	ttagagttgc	3120
ttccggtatc	caaatcactg	gagactctac	tggatcatct	aggaggctta	tataaatttc	3180
atgatcgtcc	agtgacttat	ctgtataaca	ctctgcacta	ttatgaaatg	cacctgagag	3240
accgcgcatt	tctcaaacga	aaactcgtcc	atgcgatcat	tggctctctg	aaggataatc	3300
gaccgcaggg	ctggtgtcta	agtgacactt	acctgaaatg	cgctatgaat	gcacgagagg	3360
aaaatccttg	ggttccagat	gacacctact	attgcagatt	gattggcaga	ctagtcgata	3420
cgatggctgg	caaatctcct	ggtccctttc	caaactgtga	ctggagattc	aatgagtttc	3480
ccaacccagc	tgcccatgct	ctccatgtta	cttgtgtgga	gctcatggcc	ttggcagttt	3540
caggcaaaga	agttgggaat	gcccttctaa	atgttgtcct	aaaaagtcag	cctttagtgc	3600
caagagagaa	cattacagca	tggatgaatg	caattggttt	gatcatcact	gccctaccag	3660
agccatattg	gattgttctt	catgatcgaa	ttgtgagtgt	catcagcagc	cccagcttga	3720
cgtctgaaac	agagtgggtt	ggctatccat	teegeetett	tgatttcact	gcctgtcatc	3780
agtcctactc	tgagatgagt	tgtagctata	cgttagctct	tgcacatgct	gtgtggcacc	3840
attctagcat	cggacaactt	tctctcattc	caaagtttct	tactgaagta	cttcttccta	3900
tagtgaagac	cgaattccag	ttgctttatg	tataccatct	tgttggacca	tttttacaaa	3960
gatttcagca	agagagaact	cgttgtatga	tagagattgg	tgtggcgttt	tatgacatgc	4020
tgctgaatgt	tgaccagtgt	agcacccatt	taaattacat	ggatcccatc	tgtgacttcc	4080
tctatcacat	gaagtatatg	tttactggtg	acagcgtgaa	agagcaagta	gagaagatta	4140
tctgtaactt	aaaaccagct	ttaaaacttc	gtcttcgatt	catcacacac	attagcaaga	4200
tggagccagc	tgcagtgcct	ccacaagcca	tgaacagtgg	gtctccagca	cctcagtcta	4260
atcaggtgcc	cgtgtcttta	ccagtaactc	agtgaagcca	gactgtactg	tggagaaagt	4320
agaaatatat	ccgtctttga	gagtggactc	aaacctttta	aatctgaatg	cgatcacact	4380
gtagtgatat	agtagaagca	gtgatgatat	tcagattgtt	ttattttgat	tcaaatgatg	4440
aatctgttga	caccttataa	ctcccatctc	cctatctata	tttttgtctc	taagagatca	4500
agtaagatac	atgttgttca	tattcataac	aacttattag	agctatgtag	gaacatagag	4560
				tttcctattc		4620
ttttgtttgt	atttttatt	attaatgaca	tatttagtct	tcagatatat	tattttaaag	4680
gcaccacaca	tgtaaaacag	ttattacaaa	tattttatac	ataaatctct	tggtagattt	4740
tcagaataat	agagatttat	atcaagaaaa	ggaatctaga	ttttgttgca	ttgtaggagc	4800
aaacaaggct	tcatattctt	tttaaaatga	cttgaaattt	tattataaat	ttccatagtt	4860
				gacttgaact		4920
aattagttgg	aagccatgta	agaaaataac	atctgaaaat	tcttgaactt	aaaatcatgc	4980
ttaaatggtt	gattctccaa	tttcttttt	taaaaataag	ttaattgctt	ttgcaggttg	5040
acactctcac	ctgacagatg	atgtaattct	tcaattttta	taatcttaaa	atttttaaat	5100
				tttgagagac		5160
ttgggggaat	tggcattgcg	aaagacttga	aaactaatga	gtaaagtctg	ctgaatgaaa	5220
aaaaa						5225

<210> 6028 <211> 5514

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3646)...(1248)
<223> similar to gi5360121 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6028 60 ttttttttt ttggataata aaaatttaat agcaatatca taaaataaac acacatatta aaaaatcaag tatttagttt cggatattag aaataatata cataataaat tcaacatact 120 gatagtgctg caagataaga ttttattttt caaattacat attatcgcca accagcctgc 180 tttggactca gaggttcaaa aactttgctt ttattacgaa gaacatctgg actgtagaca 240 cctctaacga aaccaggtta tacttggcat attgtgattg aagctgtgtg atcaacatct 300 taatgaccta actaaatcct ctcataacag aaagaagttc aacaggcaaa catttccctc 360 cctaggatcc tagttaccaa aactgtcaca gtgtcaaaat aaaaataatt atttcctcct 420 ttttaacatc ttattgtcct tgaagcttat gtatggagga agttaaaaac caaaagagca 480 540 actttaaget atatgetaag teagtgttaa ateeacagae taattttteg atatagtatt cctggttctg gtccttaaag agaaataaag gcattaaacc aactttttat atgtcaagaa 600 atataatttt gctattcttt cataatcaaa tctttcaatg atttctaaga ctgtttctac 660 agcctgtgtg ctagttcagg agacacactg attgtaaaag gacttgagaa tataaacttt 720 aaggctaaaa atttcatctt caaaatgtat agatgtaaac agagcccttg acaaggtgat 780 ttaatgtaga actgctggcc agaatgaaaa caagtactag acagaaaaaa gatcatgctt 840 aaagactcca ttgaaaaacc acagacaggt ccttcatgac ataggtaatt ccttcaacct 900 aaagacattt gctgaaactc aaagttaccc tattgcatag taaatcttca aaaccattaa 960 gtcaggttct gggtcaatgt ttcctatgct ttggttggat gatttaataa agtatatatt 1020 ttatgagatt taaccatgga attcaatgaa caaaatagat aaaatattag aatcttcatt 1080 1140 gaaaaatggc atgtttctcc atctttttca tgcaataaga aagtccatct taaatctgat tttttaaata aataattgct gtatttccca ctgaagcttg ttattctgat aagccaaatt 1200 caaatgcttt catatagttg aggattaaaa aacattttga ggattattca tcattatctt 1260 cttggtaggc tccatctgcc atgactaaat gaagaatctt ggcataaaga tgctgatgtt 1320 catttcccaa aatattttga actatttttg aacaaatttc aatattttca tcttcatctt catgaatagc ctttattttc tcataaacct caaagaattt ttcaaagccc atttcctgct 1440 ccagatgaag totcagttoc totaaatggt taaagacact atogcattca cattcactag 1500 caatttcacc atcactgtta tctgagtgcc attcttcgtt cagggcactt tcactgctgg 1560 gattgtcatc ttcatctgcc acatctgtcc catttgcagt tggctccaca tcactgttct 1620 tcaagactga ctcttcttct tcactgtatt cttcaccagg ttgttcccta agtaactgtt 1680 ccatcgaggc ctgcagctct tgtaaatctg tgtcagtttc ttcaaacaca atgtcttcag 1740 aatcagaagg teettettta atgtttteat etteaattte atetatttea agattgtett 1800 gacgaacatc tectaeggtg ggaacateca taagggttet gaacagettt gagagatetg 1860 gaagtgaaca tgtccttaac atctttgggt tgtttgcatc aaacagacca gttgaaagtc 1920 caatcagcaa ggaattettg tttttatttt ttggtggtaa atgcgagtga gatcgaaatg 1980 caaaggattc ttctggtgaa cactgaactg attgaacttg agggactaag ttcaagtgtt 2040 cagaatgaac caccttatgg aaaaatggtt ccggttgcac agacttatct acatcacatt 2100 tagagtgctg agaatcattg gttccaggct ctatatgaat gtcactaagt tggtccacag 2160 tactcgagac tecatettea gaaactteat ttteetgaat ggtgateeta tetgeegaet 2220 gagtttcctt tgtttctttt tcctcactaa tccacacatc agtaatagtg catggcaagc 2280 ttctcatctt tgtttgttcc acttggctct tgtagaattt ctgtttccaa atcatcaggt 2340 tcttctaaat ttccttccag tttcaatgac atctgtggag atgcctcact gaactcggga 2400 ctttttgtct caacaggaga atcaacaata gctgatgggt ttatttcatg tgaaatacat 2460 tgtacttttt tttctccagt aattaagggt ttgtactttt ccccttcggg agaaatctca 2520 cttctaatag ttgtattttc taatagttct gtctgaagtt gtagttcagc ttctccaagt 2580 atctttagaa cagaatctgt cggacttttc ccccaggctc ttcttggaga tccattagga 2640

```
cctaatttaa taacttctcc cactgtatgt ctttcagttg tagagaagga tgtatctagt
                                                                    2700
gttaactcat ccagaggaat cacaagttga cctcctgcct cccacttctt gcgatcagat
                                                                    2760
gaaactgatt tttcttttc atgetetttg geatetteat gaacatttat ctcaaaagta
                                                                    2820
                                                                    2880
teagagagat tetgetttee ttttteatet tettgagett taagatttte atttaateta
cgaagtattt ctcgcttact tgaaataqca ttqttggtct tttqcatctc ttctgaaqtt
                                                                    2940
tcccgggtat cagttaaact actgtccacg ccaacttctt tcaaagctga agttacagaa
                                                                    3000
ataacagatc tcatctgttg ctttgatgga gagccacctg tttcatgctg tcccaaaggt
                                                                    3060
ggagaaacat cagaactctt aactccttta gccaccaaat gctcttccca cacttttttt
                                                                    3120
teteteteat aageeteett tetetttegt tetagttgtt ettttagtae ageageaegt
                                                                    3180
gcatttgcat gggccttcag tgattcgatt ttttttgcgc ctcatgtcag cctcttcact
                                                                    3240
teettettgt cetteagaat gattagette tttettttea ceaegaagtt tggetttaat
                                                                    3300
ctgttggcgc tcattgaaat tctgtagtct tatttgcctc agtcttgcca gataaacctc
                                                                    3360
ttcctctttg tttcttggct tccctcctct tgaagagctg ggcctgcctc catacatagc
                                                                    3420
tgccaggttt tgcaggattc ccatatgtcc ttcggctcga gctttattct gcatagcttc
                                                                    3480
cegttttege tgeaggaact ettetaettg tttagetett tetaeageta getgeeettt
                                                                    3540
ttgcctttct ggaagacctc gaccatatat ttctcttttc catttagctt cattatcttc
                                                                    3600
tgctctttgt tgctgcattt ggtcaaaaat ggcatggtaa tgttcatact gtcctcqaqa
                                                                    3660
agaaaaagat gatggagcta tagtccctcc actgcccaga aaaggagcct ttacttcacc
                                                                    3720
acttccacca gcacttagca catttctcca tccttgttcc ctggccctat ttattctttc
                                                                    3780
caacctttcc ttttcttgcc ttttcatttg ttcagccttc attaaactaa taatctgatc
                                                                    3840
cttttgtttc ttttcttttt caataaattc cagccttctc tttcttgctg cttcctcaqa
                                                                    3900
3960
atgtttttgc agtggtttct tttcgtgtaa ttttttatct ccatatttct tatatgctaa
                                                                    4020
aggtattcca tatttagcgg caggctttgt aattttctga gcaggcataa cagaaatcqa
                                                                    4080
gttttgtcct gaagctggtc ttttaagctg gtataaggct tgtgatccaa acttcgaaaa
                                                                    4140
atgtttttaa gacaaaaatt cttcgtgcaa taagctgagg agagagaaac ttttcaatgc
                                                                    4200
gtttggctat aaaacctttc tccaatatgg agttgactga tggtctatcc ctaggatttc
                                                                    4260
ttttaaataa ctgagacacc aaactgcgga gatcatagga ataatgcaaa gacacaggtg
                                                                    4320
gaaaagatcc agatattatc ttcagtacca ggtttttcat actgccagct tcaaaagcat
                                                                    4380
gtttaagtgt acacagctca taaaggacac accccagagc ccaaatgtca cttttattat
                                                                    4440
tgtaaggttt gttttcacag atttcaggtg acaagtagta tggggtccct atgcaagttc
                                                                    4500
gagecagete tacagtacta ttaagaacte tageaattee aaaateteea agttataetq
                                                                    4560
ttccatcttt agttaaaaat atgttctgag atttaatgtc tcgatgaaga atttttctat
                                                                    4620
catgtacatg tttcagggcc aaacatatct gtacaaacca gtccaaaatc tgatcctctt
                                                                    4680
gaaacaaaac gcctttctga gcatttattc gcttaaacag atcccctccc tcacagtaat
                                                                    4740
ccattactat gtagagagag ccattttctt caaatgattc tctatactgg acaatatttg
                                                                    4800
gatgetteat gtttgeeaat actgeaactt eteteettga ttettetett tetttactqq
                                                                    4860
acattettga gatgttaatt teettgataa cataetgtet geeatettet gtagatttaa
                                                                    4920
caagaatggc ttttccaaat gaaccttctc caatcttctg tagtctaaca tacttctcca
                                                                    4980
tgattetttt tetaaggeat etttacagat atgetagaca tttaaaaaaac teagtgacae
                                                                    5040
aggacgttag taggaataac ggtgatgact aataagcatc agtctaggtg tggcagtctt
                                                                    5100
cctacggggc ttaataaagc agaggtacca tcccgcattt tgaaaatgac atcctgacac
                                                                    5160
tegtetteag ttgataceae gggtttgaet cegteetgte tegggegaeg eeegtaagae
                                                                    5220
aggtcgacac taccccgacg aaacaaacaa actggtttct gagccccgta gaaacggcgg
                                                                    5280
ggtgcagcag ggggagtgcc tccgttaccg cctctccaac ttcacagagg tcgttgctag
                                                                    5340
tggccacggc ggggtgggga cgggcggcgt tcgggactgg gaagctactt gactgccacg
                                                                    5400
tgctcctgcc tcgcaacagc ggctctagat tccgagttat ggggacaact gctcgagagg
                                                                    5460
ccagggtagg gtaaggactc cgcaacctag ggtcccaaaa ccctggagcg aatg
                                                                    5514
```

<210> 6029

<211> 3117

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (15)...(1559)
<223> similar to gi4572585 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 6029 cattggactt cagcatgact actcagttgc cagcttacgt ggcaattttg cttttctatg 60 totcaagago cagotgocag gacactttca otgoagotgt ttatgagoat goagogatat 120 tgcccaatgc caccctaaca ccagtgtctc gtgaggaggc tttggcatta atgaatcgga 180 atotggacat titggaagga gcgatcacat cagcagcaga tcaqqqtqcq catattattq 240 tgactccaga agatgctatt tatggctgga acttcaacag ggactctctc tacccatatt 300 tggaggacat cccagaccct gaagtaaact ggatcccctg taataatcgt aacagatttg 360 gccagacccc agtacaagaa agactcagct gcctgggcca agaacaactc tatctatgtt 420 gtggcaaata ttggggacaa gaagccatgc gataccagtg atcctcagtg tccccctgat 480 ggccgttacc aatacaacac tgatgtggta ttttgattct cagggaaaac tggtggcacg 540 ctaccataag caaaaccttt tcatgggtga aaatcaattc aatgtaccca aggagcctga 600 gattgtgact ttcaatacca cctttggaag ttttggcatt ttcacatgct ttgatatact 660 cttccatgat cctgctgtta ccttggtgaa agatttccac gtggacacca tagtattccc 720 aacagettgg atgaatgttt tgecacattt gteagetgtt gaatteeact eagettggge 780 tatgggcatg agggtcaatt tccttgcatc caacatacat tacccctcaa agaaaatgac 840 aggaagtggc atctatgcac ccaattcttc aagagcattt cattatgata tgaagacaga 900 agagggaaaa ctcctcctct cgcaactgga ttcccaccca tcccattctg cagtggtgaa 960 ctggacttcc tatgccagca gtatagaagc gctctcatca ggaaacaagg aatttaaagg 1020 cactgtcttt ttcgatgaat tcacttttgt qaagctcaca qqaqttqcaq qaaattatac 1080 agtttgtcag aaagatctct gctgtcattt aagctacaaa atgtctgaga acataccaaa 1140 tgaagtgtac gctctagggg catttgacgg actgcacact gtggaagggc gctattatct 1200 acagatttgt accetgttga aatgtaaaac gactaattta aacaettgeg gtgactcage 1260 tgaaacagct tctaccaggt ttgaaatgtt ctccctcagt ggcactttcg gaacccagta 1320 tgtctttcct gaggtgttgc tgagtgaaaa tcagcttgca cctggagaat ttcaggtgtc 1380 aactgacgga cgcttgttta gtctgaagcc aacatccgga cctgtcttaa cagtaactct 1440 gtttgggagg ttgtatgaga aggactgggc atcaaatgct tcatcaggcc tcacagcaca 1500 agcaagaata ataatgctaa tagttatagc acctattgta tgctcattaa gttggtagaa 1560 tattgacttt ttctcttttt tatttgggat aatttaaaaa atgatggatg agaaaagaaa 1620 gattggtccg ggttaatatt atcctctagt ataagtgaat tactagtttc tctttattta 1680 gacaaacaca cacaccag ataatataaa cttaataaat tatctgttaa tgtagatttt 1740 atttaaaaaa ctatatttga acattggtct ttcttggacg tgagctaatt atatcaaata 1800 agtatcacaa atcttttacg cagaagaaat aaaaactacg ggtagaaaac ataagaacta 1860 tcataaaatt tacttacaag gaggctgctc ttgttaccac ttttattata ttacgtatca 1920 cttattcagc tctgctgaaa atttccaatg actttgtttg tttgctcttt ttqtttttta 1980 cctaaacaat acattttgat tctcttgtgg gttgataatg tctccccaaa atttacatgt 2040 tgaagcacct cagaatgtga ctgtatttgg agacagggtc tttaaagagg taaaataagg 2100 tcattaggat agaccctaat tcaatatgac tgatgatcat aaaagaagag gcgagtaggg 2160 cacaacaggc acaaagggag accataagga gacacagagg aaggacaact ctttacaagc 2220 taagaagaga gggcctcaga agaaaccaac cctgccaaca ccttgatctt ggacttccag 2280 cctccaaaac tatgagaaat aaatttctat tgtttaagtc acccagtcca tggtactttg 2340 ttaggcagcc ctggcaaatg aatcaaagac ccattcctgt tcctctcccc accactactg 2400 ttttctactg taatctgaag cttcaacaaa aggcttacct ggtaagaata ttcagctggt 2460 ctgggtcctc aagactccaa tagacactct taaagaagga ttgctgatgg attgatagtg 2520 aaaccattag atcattgaat toototggaa ttagaaaacc agagagtooc attttaagaa 2580 attagatatt taatatagca ttgtgtgttc tattttagta acagcagaat ctcttgacat 2640 tacacaactc agtgaaacaa catcatttaa gccaaaatat ctcccaactg actgatagac 2700 tctgagcact aatatcatag tgctgtgatg atggacaatt acatagtacc gataacagcc 2760

```
atgcactgtg caaagcatgc ccttctgcac aggagagcaa ggcacttgca gtagtgatct 2820 atgccagcaa aacatcattt tgagacaaac atttttgtgg cagatgtttt tcctaaaaaag 2880 tactatatca tccaagaaat atttgagtaa aatcccttgt tcttttgggt gacattaact 2940 gacatttgct ttttttcaag acctaataga aaataagaaa gcccataatg tatttagaaa 3000 caggaatcct cagagcaatt ctctgtattc tcatataatt tcaatgtaaa acagaaaaca 3060 tattgatgtg ttggtgatag gcttgaatta ttaaaaactt caaaaacaaa aaaaaaa 3117
```

```
<210> 6030
<211> 4360
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(1962)
<223> similar to gi31738 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6030 ccgcgctctc tgatcagagg cgaagctcgg aggtcctaca ggtatggatc tctggcagct 60 gctgttgacc ttggcactgg caggatcaag tgatgctttt tctggaagtg aggccacagc 120 agctatectt agcagageae cetggagtet geaaagtgtt aateeaggee taaagacaaa 180 ttcttctaag gagcctaaat tcaccaagtg ccgttcacct gagcgagaga ctttttcatg 240 ccactggaca gatgaggttc atcatggtac aaagaaccta ggacccatac agctgttcta 300 taccagaagg aacactcaag aatggactca agaatggaaa gaatgccctg attatgtttc 360 tgctggggaa aacagctgtt actttaattc atcgtttacc tccatctgga taccttattg 420 tatcaagcta actagcaatg gtggtacagt ggatgaaaag tgtttctctg ttgatgaaat 480 agtgcaacca gatccaccca ttgccctcaa ctggacttta ctgaacgtca gtttaactgg 540 gattcatgca gatatccaag tgagatggga agcaccacgc aatgcagata ttcagaaagg 600 atggatggtt ctggagtatg aacttcaata caaagaagta aatgaaacta aatggaaaat 660 gatggaccct atattgacaa catcagttcc agtgtactca ttgaaagtgg ataaggaata 720 tgaagtgcgt gtgagatcca aacaacgaaa ctctggaaat tatggcgagt tcagtgaggt 780 getetatgta acaetteete agatgageea atttacatgt gaagaagatt tetaetttee 840 atggctctta attattatct ttggaatatt tgggctaaca gtgatgctat ttgtattctt 900 attitictaaa cagcaaagga ttaaaatgct gattitgccc ccagtticcag tticcaaagat 960 taaaggaatc gatccagatc tcctcaagga aggaaaatta gaggaggtga acacaatctt 1020 agccattcat gatagctata aacccgaatt ccacagtgat gactcttggg ttgaatttat 1080 tgagctagat attgatgagc cagatgaaaa gactgaggaa tcagacacag acagacttct 1140 aagcagtgac catgagaaat cacatagtaa cctaggggtg aaggatggcg actctggacg 1200 taccagctgt tgtgaacctg acattctgga gactgatttc aatgccaatg acatacatga 1260 gggtacctca gaggttgctc agccacagag gttaaaaggg gaagcagatc tcttatgcct 1320 tgaccagaag aatcaaaata actcacctta tcatgatgct tgccctgcta ctcagcagcc 1380 cagtgttatc caagcagaga aaaacaaacc acaaccactt cctactgaag gagctgagtc 1440 aactcaccaa gctgcccata ttcagctaag caatccaagt tcactgtcaa acatcgactt 1500 ttatgcccag gtgagcgaca ttacaccagc aggtagtgtg gtcctttccc cgggccaaaa 1560 gaataaggca gggatgtccc aatgtgacat gcacccggaa atggtctcac tctgccaaga 1620 aaacttcctt atggacaatg cctacttctg tgaggcagat gccaaaaagt gcatcctgt 1680 ggctcctcac atcaaggttg aatcacacat acagccaagg cttaaaccaa gaggacattt 1740 acatcaccac agaaagcctt acccactgct gctgggagcc cctgggacag gagaacatgt 1800 tecaggitet gagatgeetg teccagacta tacetecatt catatagtae agtececaca 1860

```
gggcctcata ctcaatgcga ctgccttgcc cttgcctgac aaagagtttc tctcatcatg
                                                                  1920
tggctatgtg agcacagacc aactgaacaa aatcatgcct tagcctttct ttggtttccc
                                                                  1980
aagagctacg tatttaatag caaagaattg actggggcaa taacgtttaa gccaaaacaa
                                                                  2040
tgtttaaacc ttttttgggg gagtgacagg atggggtatg gattctaaaa tgccttttcc
                                                                  2100
caaaatgttg aaatatgatg ttaaaaaaat aagaagaatg cttaatcaga tagatattcc
                                                                  2160
                                                                  2220
tattgtgcaa tgtaaatatt ttaaagaatt gtgtcagact gtttagtagc agtgattgtc
ttaatattqt qqqtqttaat ttttqatact aaqcattqaa tqactatqtt tttaatqtat
                                                                  2280
aqtaaatcac gctttttgaa aaagcgaaaa aatcaggtgg cttttgcggt tcaggaaaat
                                                                  2340
tqaatqcaaa ccataqcaca ggctaatttt ttgttqtttc ttaaataaqa aactttttta
                                                                  2400
tttaaaaaac taaaaactaq aqqtqaqaaa tttaaactat aaqcaaqaaq qcaaaaataq
                                                                  2460
tttggatatg taaaacattt attttgacat aaagttgata aagatatttt taataattta
                                                                  2520
gacttcaagc atggctattt tatattacac tacacactgt gtactgcagt tggtatgacc
                                                                  2580
cctctaaqqa qtqtaqcaac tacaqtctaa aqctqqttta atqttttqqc caatqcacct
                                                                  2640
aaagaaaaac aaactcgttt tttacaaagc ccttttatac ctccccagac tccttcaaca
                                                                  2700
attictaaaat gattigtagta atctigcatta tiggaatata attigtittat cigaattitt
                                                                  2760
aaacaagtat ttgttaattt agaaaacttt aaagcgtttg cacagatcaa cttaccaggc
                                                                  2820
accaaaagaa gtaaaagcaa aaaagaaaac ctttcttcac caaatcttgg ttgatgccaa
                                                                  2880
aaaaaaatac atgctaagag aagtagaaat catagctggt tcacactgac caagatactt
                                                                  2940
aagtgctgca attgcacgcg gagtgagttt tttagtgcgt gcagatggtg agagataaga
                                                                  3000
totatageet etgeagegga atetgtteae acceaacttg gttttgetae ataattatee
                                                                  3060
aggaagggaa taaggtacaa gaagcatttt gtaagttgaa gcaaatcgaa tgaaattaac
                                                                  3120
tgggtaatga aacaaagagt tcaagaaata agtttttgtt tcacagccta taaccagaca
                                                                  3180
catactcatt tttcatgata atgaacagaa catagacaga agaaacaagg ttttcagtcc
                                                                  3240
ccacagataa ctgaaaatta tttaaaccgc taaaagaaac tttctttctc actaaatctt
                                                                  3300
ttataggatt tatttaaaat agcaaaagaa gaagtttcat cattttttac ttcctctctg
                                                                  3360
agtggactgg cctcaaagca agcattcaga agaaaaagaa gcaacctcag taatttagaa
                                                                  3420
atcattttgc aatcccttaa tatcctaaac atcattcatt tttgttgttg ttgttgttga
                                                                  3480
gacagagtet egetetgteg eeaggetaga gtgeagtgge gegatettga eteactgeaa
                                                                  3540
tetecacete ceacaggite aggegatice egigeeteag cetecigagit ageigggact
                                                                  3600
acaggcacgc accaccatgc caggctaatt tttttgtatt ttagcagaga cggggtttca
                                                                  3660
ccatgttggc caggatggtc tcgatctcct gacctcgtga tccacccgac tcggcctccc
                                                                  3720
aaagtgctgg gattacaggt gtaagccacc gtgcccagcc ctaaacatca ttcttgagag
                                                                  3780
3840
cttctcattt tttaaaaaag cttaaaactt tgaagttagc tttaacttaa atagtatttc
                                                                  3900
ccatttatcg cagacctttt ttaggaagca agcttaatgg ctgataattt taaattctct
                                                                  3960
ctcttgcagg aaggactatg aaaagctaga attgagtgtt taaagttcaa catqttattt
                                                                  4020
gtaatagatg tttgatagat tttctgctac tttgctgcta tggttttctc caagagctac
                                                                  4080
4140
gtttggaaga ctatcttact atttcacaac agcctgacaa catttctata gccaaaaata
                                                                  4200
gctaaatacc tcaatcagtc tcagaatgtc attttggtac ttttggtggcc acataagcca
                                                                  4260
ttattcacta gtatgactag ttgtgtctgg cagtttatat ttaactctct ttatgtctgt
                                                                  4320
ggattttttc cttcaaagtt taataaattt attttcttgg
                                                                  4360
```

٥

```
<210> 6031
<211> 7741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (146)...(6083)
<223> similar to gi641958 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6031 ccgagcagca gtgctaaagg agcccggcgg aggcagcggt gggtttggga ctgaggcgct 60 ggatctgtgg tcgcggctgg ggacgtgcgc ccgcgccacc atcttcggct gaagaggcaa 120 ttgcttttgg atcgttccat ttacaatggc gcagagaact ggactcgagg atccagagag 180 gtatetettt gtggaeaggg etgteateta eaaceetgee aeteaagetg attggaeage 240 taaaaagcta gtgtggattc catcagaacg ccatggtttt gaggcagcta gtatcaaaga 300 360 agaacgggga gatgaagtta tggtggagtt ggcagagaat ggaaagaaag caatggtcaa caaagatgat attcagaaga tgaacccacc taagttttcc aaggtggagg atatggcaga 420 attgacatgc ttgaatgaag cttccgtttt acataatctg aaggatcgct actattcagg 480 540 actaatctat acttattctg gactcttctg tgtagttata aacccttaca agaatcttcc aatttactct gagaatatta ttgaaatgta cagagggaag aagcgtcatg agatgcctcc 600 acacatetat getatatetg aatetgetta cagatgeatg etteaagate gtgaggaeca 660 gtcaattctt tgcacgggtg agtcaggtgc tgggaagaca gaaaatacaa agaaagttat 720 teagtacett geceatgttg ettetteaca taaaggaaga aaggaceata atatteetgg 780 ggaacettga acggcagett ttgcaagcaa atccaattet ggagtcattt ggaaatgcga 840 ggactgttca aaatgataac tcatctcgtt ttggcaaatt tattcggatc aactttgatg 900 taactggcta tatcgttggg gccaacattg aaacatacct tctggaaaag tctcgtgctq 960 1020 ttcgtcaagc aaaagatgaa cgtacttttc atatctttta ccagttgtta tctgggagca ggagaacacc taaagtctga tttgcttctt gaagggttta ataactacag gtttctctcc 1080 aatggctata ttcctattcc gggacagcca agacaaaggt aatttccggg gggaccctgg 1140 ggaggcaatg cacataatgg gcttctccca tgaagagatt ctgtcaatgc ttaaagtagt 1200 atetteagtg etacagtttg gaaatattte ttteaaaaag gagagaaata etgateaage 1260 ttccatgcca gaaaatacag ttgcgcagaa gctctgccat cttcttggga tgaatgtgat 1320 ggagtttact cgggccatcc tgactccccg gatcaaggtc ggccgagact atgtgcaaaa 1380 agcccagacc aaagaacagg cagattttgc agtagaagca ttggcaaaag ctacctatga 1440 1500 geggetettt egetggeteg tteategeat caataaaget etggatagga ceaaaegtea gggagcatct ttcattggaa tcctggatat tgctggattt gaaatttttg agctgaactc 1560 ctttgaacaa ctttgcatca actacaccaa tgagaagctg cagcagctgt tcaaccacac 1620 catgtttatc ctagaacaag aggaatacca gcgcgaaggc atcgagtgga acttcatcga 1680 tttcgggctg gatctgcagc catgcatcga cctaatagag agacctgcga accctcctgg 1740 tgtactggcc cttttggatg aagaatgctg gttccctaaa gccacagata aaacctttgt 1800 tgaaaaactg gttcaagagc aaggttccca ctccaagttt cagaaacctc gacaattaaa 1860 agacaaaget gatttttgca ttatacatta tgcagggaag gtggactata aggcagatga 1920 gtggctgatg aagaatatgg accccctgaa tgacaacgtg gccacccttt tgcaccagtc 1980 atcagacaga tttgtggcag agctttggaa agatgtggac cgtatcgtgg gtctggatca 2040 agtcactggt atgactgaga cagcttttgg ctccgcatat aaaaccaaga agggcatgtt 2100 tegtacegtt gggcaactet acaaagaate tetcaceaag etgatggcaa eteteegaaa 2160 caccaaccet aactitgite gitgiateat tecaaateae gagaagaggg eiggaaaatt 2220 ggatccacac ctagtcctag atcagcttcg ctgtaatggt gtcctggaag ggatccgaat 2280 ctgtcgccag ggcttcccta accgaatagt tttccaggaa ttcagacaga gatatgagat 2340 cctaactcca aatgctattc ctaaaggttt tatggatggt aaacaggcct gtgaacgaat 2400 gatccgggct ttagaattgg acccaaactt gtacagaatt ggacagagca agatattttt 2460 cagagetgga gttetggeac aettagagga agaaagagat ttaaaaaatca eegatateat 2520 tatcttcttc caggccgttt gcagaggtta cctggccaga aaggcctttg ccaagaagca 2580 gcagcaacta agtgccttaa aggtcttgca gcggaactgt gccgcgtacc tgaaattacg 2640 gcactggcag tggtggcgag tettcacaaa ggtgaagccg ettctacaag tgactcgcca 2700 ggaggaagaa cttcaggcca aagatgaaga gctgttgaag gtgaaggaga agcagacaaa 2760 ggtggaagga gagctggagg agatggagcg gaagcaccag cagcttttag aagagaagaa 2820 tatccttgca gaacaactac aagcagagac tgagctcttt gctgaagcag aagagatgag 2880 ggcaagactt gctgctaaaa agcaggaatt agaagagatt ctacatgact tggagtctag 2940 3000 acatattcag gacctggaag aacagctaga cgaggaggaa ggggctcggc aaaagctgca 3060 gctggaaaag gtgacagcag aggccaagat caagaagatg gaagaggaga ttctgcttct 3120

```
3180
cgaggaccaa aattccaagt tcatcaaaga aaagaaactc atggaagatc gcattgctga
                                                                     3240
gtgttcctct cagctggctg aagaggaaga aaaggcgaaa aacttggcca aaatcaggaa
                                                                     3300
taagcaagaa gtgatgatct cagatttaga agaacgctta aagaaggaag aaaagactcg
                                                                     3360
tcaggaactg gaaaaggcca aaagaaaact cgacggggag acgaccgacc tgcaggacca
                                                                     3420
gategeagag etgeaggege agattgatga geteaagetg eagetggeea agaaggagga
                                                                     3480
ggagctgcag ggcgcactgg ccagaggtga tgatgaaaca ctccataaga acaatgccct
                                                                     3540
taaagttgtg cgagagctac aagcccaaat tgctgaactt caggaagact ttgaatccga
gaaggettea eggaacaagg eegaaaagea gaaaagggae ttgagtgagg aactggaage
                                                                     3600
tetgaaaaca gagetggagg acaegetgga caccaeggea geecageagg aactaegtae
                                                                     3660
                                                                     3720
aaaacgtgaa caagaagtgg cagagctgaa gaaagctctt gaggaggaaa ctaagaacca
                                                                     3780
tgaageteaa ateeaggaca tgagacaaag acaegcaaca geeetggagg ageteteaga
                                                                     3840
gcagctggaa caggccaagc ggttcaaagc aaatctagag aagaacaagc agggcctgga
                                                                     3900
gacagataac aaggagctgg cgtgtgaggt gaaggtcctg cagcaggtca aggctgagtc
tgagcacaag aggaagaagc tcgacgcgca ggtccaggag ctccatgcca aggtctctga
                                                                     3960
aggcgacagg ctcagggtgg agctggcgga gaaagcaagt aagctgcaga atgagctaga
                                                                     4020
taatgtctcc accettctgg aagaagcaga gaagaagggt attaaatttg ctaaggatge
                                                                     4080
                                                                     4140
agetagtett gagteteaac tacaggatac acaggagett etteaggagg agacaegeea
gaaactaaac ctgagcagtc ggatccggca gctggaagag gagaagaaca gtcttcagga
                                                                     4200
gcagcaggag gaggaggagg aggccaggaa gaacctggag aagcaagtgc tggccctgca
                                                                     4260
                                                                     4320
gtcccagttg gctgatacca agaagaaagt agatgacgac ctgggaacaa ttgaaagtct
ggaagaagcc aagaagaagc ttctgaagga cgcggaggcc ctgagccagc gcctggagga
                                                                     4380
gaaggcactg gcgtatgaca aactggagaa gaccaagaac cgcctgcagc aggagctgga
                                                                     4440
cgacctcacg gtggacctgg accaccagcg ccaggtcgcc tccaacttgg agaagaagca
                                                                     4500
agaagaagtt tgaccagctg ttagcagaag agaagagcat ctctgctcgc tatgccgaag
                                                                     4560
agegggaceg ggeegaagee gaggeeagag agaaagaaae caaageeetg teaetggeee
                                                                     4620
gggccctcga ggaagccctg gaggccaagg aggagtttga gaggcagaac aagcagctcc
                                                                     4680
gagcagacat ggaagacctc atgagctcca aagatgatgt gggaaaaaac gttcacgaac
                                                                     4740
ttgaaaaatc caaacgggcc ctagagcagc aggtcggagg aaatgaggac ccagctggag
                                                                     4800
gagctggaag acgaactcca ggccacggaa gatgccaagc ttcgtctgga ggtcaacatg
                                                                     4860
caggccatga aggcgcagtt cgagagagac ctgcaaacca gggatgagca gaatgaagag
                                                                     4920
aagaagegge tgetgateaa acaggtgegg gagetegagg eggagetgga ggatgagagg
                                                                     4980
aaacagcggg cgcttgctgt agcttcaaag aaaaagatgg agatagacct gaaggacctc
                                                                     5040
gaageeeaaa tegaggetge gaacaaaget egggatgagg tgattaagea geteegeaag
                                                                     5100
ctccaggctc agatgaagga ttaccaacgt gaattagaag aagctcgtgc atccagagat
                                                                     5160
gagatttttg ctcaatccaa agagagtgaa aagaaattga agagtctgga agcagaaatc
                                                                     5220
ettcaattge aggaggaact tgeetcatet gagegageee geegaeaege egageaggag
                                                                     5280
agagatgage tggeggaega gateaceaae agegeetetg geaagteege getgetggat
                                                                     5340
gagaagcggc gtctggaagc tcggatcgca cagctggagg aggagctgga agaggagcag
                                                                     5400
agcaacatgg agctgctcaa cgaccgcttc cgcaagacca ctctacaggt ggacacactg
                                                                     5460
aacgccgagc tagcagccga gcgcagcgcc gcccagaaga gtgacaatgc acgccagcaa
                                                                     5520
ctggagcggc agaacaagga gctgaaggcc aagctgcagg aactcgaggg tgctgtcaag
                                                                     5580
tctaagttca aggccaccat ctcagccctg gaggccaaga ttgggcagct ggaggagcag
                                                                     5640
cttgagcagg aagccaagga acgagcagcc gccaacaaat tagtccgtcg cactgagaag
                                                                     5700
aagctgaaag aaatcttcat gcaggttgag gatgagcgtc gacacgcgga ccagtataaa
                                                                     5760
gagcagatgg agaaggccaa cgctcggatg aagcagctta aacgccagct ggaggaagca
                                                                     5820
gaagaagaag cgacgcgtgc caacgcatct cggcgtaaac tccagcggga actggatgat
                                                                     5880
gccaccgagg ccaacgaggg cctgagccgc gaggtcagca ccctgaagaa ccggctgagg
                                                                     5940
eggggtggee ceateagett etetteeage egatetggee ggegeeaget geacettgaa
                                                                     6000
ggagcttccc tggagctctc cgacgatgac acagaaagta agaccagtga tgtcaacgag
                                                                     6060
acgcagccac cccagtcaga gtaaagttgc aggaagccag aggaggcaat acagtgggac
                                                                     6120
agttaggaat gcacccgggg cctcctgcag atttcggaaa ttggcaagct acgggattcc
                                                                     6180
ttcctgaaag atcaactgtg tcttaaggct ctccagccta tgcatactgt atcctgcttc
                                                                     6240
aaacttaggt acaattgctc ccctttttat atacagacac acacaggaca catatattaa
                                                                     6300
acagattgtt tcatcattgc atctattttc catatagtca tcaagagacc attttataaa
                                                                     6360
acatggtaag accettttta aaacaaacte caggeeettg gttgegggte getgggttat
                                                                     6420
tggggcagcg ccgtggtcgt cactcagtcg ctctgcatgc tctctgtcat acagacaggt
                                                                     6480
aacctagtte tgtgtteaeg tggeeeeega egaeteagee acateaagte teetagaeea
                                                                     6540
```

```
ctgtggactc taaactgcac ttgtctctct catttccttc aaataatgat caatgctatt
                                                                     6600
tcagtgagca aactgtgaaa ggggctttgg aaagagtagg aggggtgggc tggatcggaa
                                                                     6660
gcaacaccca tttggggtta ccatgtccat cccccaaggg gggccctgcc cctcgagtcg
                                                                     6720
atggtgtccc gcatctactc atgtgaactg gccttggcga gggctggtct gtgcatagaa
                                                                     6780
gggatagtgg ccacactgca gctgaggccc caggtggcag ccatggatca tgtagacttc
                                                                     6840
cagatggtct cccgaaccgc ctggctctgc cggcgccctc ctcacgtcag gagcaagcag
                                                                     6900
ccgtggaccc ctaagccgag ctggtggaag gccctcccc gtcgccagcc gggccctcat
                                                                     6960
gctgaccttg caaattcagc cgctgctttg agcccaaaat gggaatattg gttttgtgtc
                                                                     7020
cgaggcttgt tccaagtttg tcaatgaggt ttatggagcc tccagaacag atgccatctt
                                                                     7080
cetgaatgtt gacatgecag tgggtgtgac teetteattt tteettetee etteeetttg
                                                                     7140
ggacagtgtt acagttgaac acttagcatc ctgttttttg gttggtagtt aagccaaacc
                                                                     7200
gaacattacg ggaaaagtgc ccctagaaca ccaacagtac cctaagaaca atgttgaaat
                                                                     7260
aataatccat tccggcccct cctataacca atttaaatgg tattccaagt tttggacctg
                                                                     7320
gtggcctcca tatccatgga cccctctcct agtcaaaagt ggtaattaca gcacattcag
                                                                     7380
tgcacaatgg aatcaggtgt taattcctaa atcccttgat ccctctgcaa tgtgccttga
                                                                     7440
aaaccacaaa cccttttggg gtaaaaagct ttaaccatcc tattagggaa gaatttgtcc
                                                                     7500
ctgtgggttt gggaatcctt ggattttccc ccatttatga actgtacctg gctgttgacc
                                                                     7560
caccagacac ctgaccgcaa atatcttttc ttgtattccc atatttctaq acaatqqatt
                                                                     7620
tttgtaagac aataaattta ttcattatag atatttgcgc ctgctctgtt tacttgaaga
                                                                     7680
aaaaaagcac ccgtggagaa taaagagacc tcaataaaca agaataatca tgtgaacgtg
                                                                     7740
g
                                                                     7741
```

```
<210> 6032
<211> 1812
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (237)...(543)
<223> similar to gi9449 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6032
cggggcttcg cgtctgtgct tcctgtggct gacgtcatct ggaggagatt tgctttcttt
                                                                       60
ttctccaaaa ggggaggaaa ttgaaactga gtggcccacg atgggaagag gggaagccca
                                                                      120
ggggtacagg aggcctctgg gtgaaggcag aggctaacat ggggttcgga gcgaccttgg
                                                                      180
ccgttggcct gaccatcttt gtgctgtctg tcgtcactat catcatctgc ttcacctgct
                                                                      240
cctgctgctg cctttacaag acgtgccgcc gaccacgtcc ggttgtcacc accaccacat
                                                                      300
ecaccactgt ggtgcatgec cettateete ageetecaag tgtgeegeee agetaeeetg
                                                                      360
gaccaagcta ccagggctac cacaccatgc cgcctcagcc agggatgcca gcagcaccct
                                                                      420
acccaatgca gtacccacca cettacccag eccageccat gggeccaceg gectaccaeg
                                                                      480
agaccetgge tggaggagea geegegeeet acceegeeag ceageeteet tacaaccegg
                                                                      540
cctacatgga tgccccgaag gcggccctct gagcattccc tggcctctct ggctgccact
                                                                      600
tggttatgtt gtgtgtgtgc gtgagtggtg tgcaggcgcg gttccttacg ccccatgtgt
                                                                      660
gctgtgtgtg tccaggcacg gttccttacg ccccatgtgt gctgtgtgtg tcctgcctgt
                                                                      720
atatgtggct tcctctgatg ctgacaaggt ggggaacaat ccttgccaga gtgggctggg
                                                                      780
accagacttt gttctcttcc tcacctgaaa ttatgcttcc taaaatctca agccaaactc
                                                                      840
aaagaatggg gtggtggggg gcaccctgtg aggtggcccc tgagaggtgg gggcctctcc
                                                                      900
agggcacate tggagttett etecagetta ecetagggtg accaagtagg geetgteaca
                                                                      960
```

```
ccagggtggc gcagctttct gtgtgatgca gatgtgtcct ggtttcggca gcgtagccag
                                                                     1020
ctgctgcttg aggccatggc tcgtccccgg agttgggggt acccgttgca gagccaggga
                                                                     1080
catgatgcag gcgaagcttg ggatctggcc aagttggact ttgatccttt gggcagatgt
                                                                     1140
cccattgctc cctggagcct gtcatgcctg ttggggatca ggcagcctcc tgatgccaga
                                                                     1200
acacctcagg cagageceta ctcagetgta cetgtetgee tggaetgtee cetgteeceg
                                                                     1260
catctcccct gggaccagct ggagggccac atgcacacac agcctagctg cccccaggga
                                                                     1320
getetgetge cettgetgge cetgecette ceacaggtga geagggetee tgtecaceag
                                                                     1380
cacactcagt totottocot goagtgtttt cattttattt tagccaaaca ttttgcctgt
                                                                     1440
tttctgtttc aaacatgata gttgatatga gactgaaacc cctgggttgt ggagggaaat
                                                                     1500
tggctcagag atggacaacc tggcaactgt gagtccctgc ttcccgacac cagcctcatg
                                                                     1560
gaatatgcaa caactcctgt accccagtcc acggtgttct ggcagcaggg acacctgggc
                                                                     1620
caatgggcca totggaccaa aggtggggtg tggggccctg gatggcagct ctggcccaga
                                                                     1680
catgaatace tegtgtteet ceteceteta ttactgttte accagagetg tettagetea
                                                                     1740
aatctgttgt gtttctgagt ctagggtctg tacacttgtt tataataaat gcaatcgttt
                                                                     1800
ggaaaaaaa aa
                                                                     1812
```

```
<210> 6033
<211> 2631
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (87)...(538)
<223> similar to gi31843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6033 cggcggcgtc gaccagacac tgacacttgc agttgtcttt ggtagttttt ttgcactaac 60 ttcaggaacc agctcatgat ctcaggatgt atggaaaaat aatctttgta ttactattgt 120 cagcaattgt gagcatatca gcatcaagta ccactggtgt ggcaatgcac acttcaacct 180 cttcttcagt cacaaagagt tacatctcat cacagacaaa tgatacgcac aaacgggaca 240 catatgcagc cactcctaga gctcatgaag tttcagaaat ttctgttaga actgtttacc 300 ctccagaaga ggaaaccgga gaaagggtac aacttgccca tcatttctct qaaccaqaqa 360 taacactcat tatttttggg gtgatggctg gtgttattgg aacgatcctc ttaatttctt 420 acggtattcg ccgactgata aagaaaagcc catctgatgt aaaacctctc ccgccgccct 480 gacacagacg tgcctttaag ttctgttgaa atagataatc cagagtcaag tgatcaatga 540 gtatetgtte acceaaacce aaatgtggaa agaacacaag gaggaccata ggacttecag 600 tcaagtgaaa aattaaccat gtggactgga ccctcccaat aaattatata cctgcctaag 660 ttgtacaatt tcagaatgcg aattttcatt ataatgagtt ccagtgactc aatgatgggg 720 aaaaaaatct ctgctcatta atatttcaag ataaagaaca aatgtttcct tgaatgcttg 780 cttttgtgtg ttagcataat ttttagaatt gtttgagaat tctgatccaa aactttagtt 840 gaattcatct acgtttgttt aatattaact taacctattc tattgtatta taatgatgat 900 tctgtcaaat gaaaggcttg aaatacctag atgaagttta gattttcttc ctaattgtaa 960 acttttgagt ctggtttcat tgttttaaat aaattaaggg gacactaaag tcctatcatt 1020 catttccttc attggctgaa cagggcaaga tataatatta catgaatgat tactatattt 1080 tgttcacact aataaagctt atgctcagaa atgccataca cacacacaaa cacacacatt 1140 tatcatttaa tgcataaatc aacacaaaag gttttcccat taatatgaaa tattacatat 1200 atataagtgc catatttaaa ataatttgtc taaacagtag aactatgtcg gagcactcac 1260 tgaagcttgc attccgctga aagagttatt tgtgtaagta gagtatccgg agaaggaaaa 1320

```
gaacttacga cetttettta taacagaaag etcagetgta aatteaacaa gatgtgeaaa
                                                                     1380
ccggacatgc aggtgaatat tttaataggt tactataagg ttctcaatta aattctttaa
                                                                     1440
tetgtecagt cecagtitet ettattaata aaactitgga aattgetita aaccatttaa
                                                                     1500
aggaaatttc tagatataga aactaaggac tgtgactata cagctgtcac tcatttgtag
                                                                     1560
taaaacttaa aaagcaaaaa caaaaaacaa aaaagacctt cctgtgatac tttatttccg
                                                                     1620
aactaataaa aatctatatg actttttatt attgtgtgat aaccaagtaa atgttttcta
                                                                     1680
ttttgcatat tttcaggcat ggtaacagaa atttaccttt taataaatta aaaaatctaa
                                                                     1740
attttaacct acttgtatgt tcggagagtg tttttgtact atattgacta cttaaaatag
                                                                     1800
agaatgagac taagaaggga acatttctgt tgatacatgt tttttaaaag taattttaag
                                                                     1860
agcattatta ggttaattta atccaattaa tgacccaaat qccaaqqtaa ttttaaattt
                                                                     1920
acatttttaa taaaagcaac atgttgaaac aagagagggt gagattaacc tttttgctaa
                                                                     1980
agtaatttac aagtcaaaga caggaagaga tcaqaqtqaa tqtqccttct taaccaqaqc
                                                                     2040
tacagaattt agtgaataat taaagtacaa actgctttga cctccttgaa cttttccaag
                                                                     2100
caatttctct gtacttctat atatgaatgt cttagccaat tttctgctac tataacagaa
                                                                     2160
tacgacagac tgggtaattt aaaaagaaaa gaaatttatt ttcttcctaq ttctqqaqqc
                                                                     2220
tgggaaggcg aagggcatgg cactgacatc tgccttgtaa ctgatgagaa ccttcttact
                                                                     2280
gcatgataac aaagcagcaa ggcaagcaaa agcgtaagat gaagagagag gaaatgaagc
                                                                     2340
caaacacatc ctttcatcag aagcccattc cctctataag gcgttattac atttatgaga
                                                                     2400
atggagteet catgacetaa tegtgaeett aaaggeeeet eecaacaetg ttacaatgge
                                                                     2460
aattaaattt caacaaaggt tccagaggtg acattcgaat cagcaatgaa attttcatag
                                                                     2520
ttaaatttgg tattcgtggg ggaagaaatg accatttccc ttgtattttt ataattaaat
                                                                     2580
cagcaaaata ttgtaataaa gaaatctttc ctgtgaagat accatgaccc c
                                                                     2631
```

```
<210> 6034
<211> 2036
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (115)...(247)
<223> similar to gi4336401 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6034
ttttttttt ttttacttga cagatttcat tgaatctaat aaatctgtat gtatgtacat
                                                                       60
atatatagac acacacaaat tttaacttgt tattaatctt tatagagaca gtgtctcact
                                                                      120
ctgttgccca ggctggagtg cggtggcatg attagaactg actgtaacct tgaactcatg
                                                                      180
ggctcaagcg atcctcctgc cttggcttcc caaaaccctg gaattaacag atqtqaqcca
                                                                      240
ccacactggc caaattttaa catctttgtt attgaaatac aagtgtttaa tttqccqqca
                                                                      300
tattttttaa caatacataa aatactaccg catcttaaag ttgatgttat cttagattca
                                                                      360
atgaaatatg ataactggat gtgaataaga aggaattcaa aagcaaagtt tcaaacccqa
                                                                      420
gtgactggaa gggagtttcc ttgagcccca caggagagtc taaccaaatc ttccatttga
                                                                      480
gcaatgatcc ccagacaata ctgctctccc accttcccca cttgaactta ttaataagag
                                                                      540
gaagtagtta ttaatgacaa ctttaatatg aacatgtgct taaccctcaa qaaattqtca
                                                                      600
caactgaaag acgggagcaa gctgacactg caaggaacac atgatgcttt ggaatgqqtq
                                                                      660
gcctgcgtat tcaaacacat caaagcagca gttacttgaa caatcggaac ttcttcaaat
                                                                      720
actggcccac ttcttccttg gggtagggcc ggagagcaat acaaqtgqcq atattctctq
                                                                      780
gttgctcaag ccacagcatg tggtcaatgt tcttctgttg cagggtctcg gccagctcct
                                                                      840
ttagggtggt ctcatctggg gcctcgagga ccactttgcg catgcgcccc agctcttgga
                                                                      900
```

```
ggtaagegge tgtgtgeggg tggtegeggt gagtgtgeaa ggeegeggtg geegegtgae
                                                                     960
aagcctgcgc taccagtgcg cccgccggcc aggagaacgg agcttgtgat agatcctttc
                                                                    1020
                                                                    1080
gtaacaccaa gtattgtacc aggacctgcg gctccgcccc agaggccgcc atcttcctga
ccacccgaaa ggccggacct actccccggt gcatcttggg atcagggcgg ggccctgagc
                                                                    1140
gccgccatgc ttttgtacgg caggatcgca aagcacgccg ggaccggttg gtttggtttt
                                                                    1200
gaagacgtgg atggcgggaa ttctcgcttc tggcctggca aggacattgg agtccctatc
                                                                    1260
accggttgcc tagacaactt catgggaagg cccttgggaa tctgagatgg agcaggcgaa
                                                                    1320
ccctttacgt ccagatggcg agtccaaagg aggtgtttta gctcacttgg aaaggctaga
                                                                    1380
gacccaagtg agcagatccc gtaaacagtc tgaagagctg cagagcgtgc aggcccagga
                                                                    1440
aggtgetett ggaaccaaga tteataaact aaggegtetg egagatgage tgagggetgt
                                                                    1500
ggtgcggcac cggcgagcca gcgtgaaagc atgtattgcc aatgtagaac ccaaccaaac
                                                                    1560
                                                                    1620
agtggagatc aatgagcaag aagcattgga agagaaattg gaaaatgtga aagccattct
gcaggcatat cattttacag gttttgtttg tttttttaac ctaatttagt ctgggtctgc
                                                                    1680
ctctagtgag ttagtttgct agatgtgtta tcagtcctgg aattatttca taatttatag
                                                                    1740
tattttacac cctctgccct catcactcac acacacaca acacagacac acacacaget
                                                                    1800
gacgtgctat ttgtaggcct atcttcacct acaagattga ctggcccctt tgtacagcag
                                                                    1860
ctcagttggt ggctggctta ttccactcat cttaacagtt cgtcatgtgc cagaccttgt
                                                                    1920
actagaactg tctttactgc tggcttgttt tctgccacta gtgaaatagt ttgaactttc
                                                                    1980
caagteteeg ttteacegta aatagggatt tatteteeca tetatgeece tgtatt
                                                                    2036
```

```
<210> 6035
<211> 3053
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(2860)
<223> similar to gi5456900 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6035
atgcgatgtt tggttttcag agaaggggat tgggcacccc acgactacag ctctggcttc
                                                                       60
tectectega attetgggag gtggggageg gecageteca etacteegte teggaggagg
                                                                      120
ccaaacacgg caccttegtg ggccgcateg cgcaggacct ggggctggag ctggcggagc
                                                                      180
tggtgcagcg cctgttccgg gtggcgtcca aaacacatgg ggaccttctg gaggtaaatc
                                                                      240
tgcagaatgg cattttgttt gtgaattete ggategaeeg egaggagetg tgegggeaga
                                                                      300
gcgcggagtg cagcatccac ctggaggtga tcgtggacag gccgctgcag gttttccatg
                                                                      360
tgaacgtgga ggtgaaggac attaacgaca acccgccggt gttctcgctc agagaacaaa
                                                                      420
agctgctgat tgcggaatct aagcaatcgg actcgcgttt tccactagag ggagcttctg
                                                                      480
atgctgacat tgaagagaat gctctattga cctacaggct aagtaaaaat gagtattttt
                                                                      540
ctttagattc accaacaat ggtaagcaga ttaaaagact gtcacttatt ttaaagaagt
                                                                      600
ctctggatag agagaaaact ccggaactta atttgctgct aacagctaca gacgggggaa
                                                                      660
aaccagaget tactggcace gtteggetgt tagtecaagt ettggatgte aacgacaatg
                                                                      720
atccagagtt tgataaatca gaatataagg tgagcettat ggaaaatget getaaagaaa
                                                                      780
etettgtget caaactaaac gecacagace gagacgaagg agtcaacgga gaggtaacat
                                                                      840
acteettete cagtgatgtt tetecagata taaaateeaa gttecacatg gacceettaa
                                                                      900
gtggggcaat cacagtgata ggacatatgg attttgaaga aagtagagca cacaagatcc
                                                                      960
cagtcgaggc tgtcgataaa ggcttcccac ccctggctgg tcattgtaca gttcttgtgg
                                                                     1020
aagttgtgga tgtaaatgac aatgctccac agttgactct cacttccctg tctctcccta
                                                                     1080
```

```
ttccaqagga cgcccaacca ggtaccqtca tcacattgat taqcqtgttt gaccgagatt
                                                                   1140
                                                                   1200
ttggagtcaa cggacaggtt acctgctccc tgacgccccg cgttcccttc aagttggtgt
ccaccttcaa gaattactat tcattggtgc tggacagcgc tctggaccgc gagagtgtgt
                                                                  1260
cegectatga getggtggtt acegegeggg acgggggete geettetetg tgggccactg
                                                                   1320
ctagcgtgtc cgtggaggtg gccgacgtga acgacaacgc cccggcgttc gcgcagcccg
                                                                   1380
agtatacggt gttcgtgaag gagaacaacc cgccgggctg ccacatcttc acggtgtctg
                                                                   1440
cgcgagacgc ggacgcgcag gagaacgcgc tggtgtccta ctcgctggtg gagcggcggg
                                                                  1500
tgggcgagcg cgcgttgtcg agctacattt cggtgcacgc ggagagcggc aaggtgtacg
                                                                   1560
cgctgcagcc gctggaccac gaggagctag agctgctgca gtttcaggtg agcgcgcgc
                                                                  1620
acgcgggcgt gccgcctctg ggcagcaacg tgacgctgca ggtgttcgtg ctggacgaga
                                                                   1680
acgacaacgc gccggcgctg ctggcgcctc gggtgggtgg tactggtggt gcagtgagcg
                                                                   1740
agetggtgcc geggtcactg ggtgcaggcc aagtggtggc gaaggtacgt gcagtggacg
                                                                  1800
ctgactcagg ctacaacgcg tggctttcgt atgagttgca accgqtqqcq qccqqtqcqa
                                                                   1860
1920
agacggacgc accgcgccac cgccttctgg tgcttgtgaa ggaccacggg gagccctcgc
                                                                  1980
tgacagccac agccaccgtg ctggtgtcgc tggtggaaag cggccaggca ccaaaggcgt
                                                                  2040
cgtcgcgggc atcgttgggc attgcaggcc cagagaccga gctggtggat gtcaacgtgt
                                                                   2100
acctgateat egecatetge geggtgteea gtetgttggt gettaceetg etgetgtaca
                                                                  2160
eggegttgeg gtgeteageg cegteetetg agggegeatg tagtttggta aageeeacte
                                                                  2220
tggtgtgctc cagcgcggtg gggagctggt cattctccca gcagaggcgg cagagggtgt
                                                                   2280
getetgggga gggeecacce aagacagace teatggeett eagteecage etteeteett
                                                                  2340
gtgctggatc tacagagcga acgggagaaa cagctctgct tcctcagaat cctttgcaaa
                                                                  2400
gccacgacag cccaaccctg actggcgtta ctctgcctcc ctgagagcag gcatgcacag
                                                                  2460
ctctgtgcac ctagaggagg ctggcattct acgggctggt ccaggagggc ctgatcagca
                                                                  2520
gtggccaaca gtatccagtg caacaccaga accagaggca ggagaagtgt cccctccagt
                                                                  2580
cggtgcgggt gtcaacagca acagctggac ctttaaatac ggaccaggca accccaaaca
                                                                   2640
atcoggtoco ggtgagttgo cogacaaatt cattatocca ggatotoctg caatcatoto
                                                                   2700
catccggcag gagcctacta acagccaaat tgacaaaagt gacttcataa ccttcggcaa
                                                                  2760
aaaggaggag accaagaaaa agaagaaaaa gaagaagggt aacaagaccc aqqaqaaaaa
                                                                  2820
agagaaaggg aacagcacga ctgacaacag tgaccagtga ggtcctcaaa tggaaacaag
                                                                   2880
ccacttagcc agtttttgta ataatggcaa atctctccca tgtagcaatt ccctgctcct
                                                                  2940
ttttcctatc tacatgagcc ctcttagaga cctcagaaat ctgcagaaag ttccctgtgt
                                                                  3000
ctgttttggg acgcatttaa caggttttgt cgtaaaagct ttactaagtc tgg
                                                                  3053
```

```
<210> 6036
<211> 1998
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1910)...(1300)
<223> similar to gi2062022 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6036

ttttttttt ttgtgggtaa aaccattttt attaactgac caaagcacat cattttgttt 60

tctgatttga ggtaaaatca taaaacacag ttcacaagaa aatacaatga ctatttaacc 120
acaattacaa gtttgaaatc tcactaggtg ttcatatact tttacaaatt catacaactg 180
tatagtctac ttaagcttag tgttaaccaa aagagcaata tcaaagacct agacacttga 240
```

```
ctactacttt tgcagtgggt atagttttat aacaacagaa taactgttac cttatgaata
                                                                    300
360
tgcatgaagg ctcttaggag agcaaacacc tgttcctatt ctgtatgtcc ctccctcatt
                                                                    420
tcaaatgaga gtaaccaatt gagtaaaata accaaataac cattgcccca ccatgaacat
                                                                    480
                                                                    540
ggggcttggg aagacagtcc tacaatcttc atcatatatt taggttttta ggccagccag
                                                                   600
ctcttttttt ccaaagcttt cttttgaatg ttcagatcct attaatccta actatagact
                                                                    660
actgtgtttg tgagggtgtc tgagtgtcta tgtgagggca aggacaacag tgcagtccag
                                                                    720
aaacacagaa aatatgcttt tttgcagctg agctctgttt tgagatttca ttttgttact
                                                                    780
ggacagcgct taatccatac caaagtcttt ggaacactgc agatttgctt tagaggtaga
taaaacagaa atcatgcagt taagtcaatt gagaaaaaaa aagggatttg ttgtctttac
                                                                    840
                                                                    900
agaacatcat gactaaaagt tgatcctttg ctcttggtgc acatttaaga tttttacctg
ttttgggaaa tacccaagtc ttccttgtct ctcaggaaaa acacatttaa attcatcctg
                                                                   960
tactaactac agatagaaga acagcagtat taccatgtgt attgcagcac tgcagttcac
                                                                   1020
                                                                   1080
tttctggatt tgtgacacac aaacacatca tgtgacgtcg catgcacgcg taagcttggg
accetegagg gatectetag ageggeegee etttttttt tetttteat tetaagaagt
                                                                   1140
taattttatt agtgtcacta gtgatgttaa ttaaaaaact tatagcaagt gctcaaaact
                                                                   1200
ttctaaatat tgtaatcact atgttttaaa gacagagtgg actgttacaa atgattttgc
                                                                   1260
aaaatacaaa aatagatata cttccactga aatgctttaa tcatttttcc gggcactctc
                                                                   1320
atcttttggt tetteeteat etgagtaeae agtgggetee teeceeteet teageagttt
                                                                   1380
gcccacgtga tgatacttga aagtgaactg agactcccag tcactcagag tctccctgct
                                                                   1440
gggcagcaag tgaggtcaga aagggtcatc gttactcatc cttcaggggc ttccttatcc
                                                                   1500
agggcaaaat tgtaggcaag gcccctggga tgcattttct tccagcaaag accccatacg
                                                                   1560
ggcccctcgg gccccgtaag aaatttgcgg gcctttgggt cacatcgaac accttgccgt
                                                                   1620
                                                                   1680
tgatggccca tgagtatggc gcggggtcct ggacgccgtc gaagcgccgc agcttcggcg
                                                                   1740
gggggtgaag tegegeeget tgaggegggg cagaggggge ggetegtegt egtegetgte
                                                                   1800
geogettgge egeoggetgg teecegegea egatettgta gageaggaag atgeatgagg
                                                                   1860
ccaagcagca gcaggttgag cggcgacgtg aaaatctcat gcagcagccc gccgctctcc
agategettg ggteggegee agtegeeace acateetegg eagecatgat etetggagta
                                                                   1920
aaggttgggc cgcgctaggc agggatccgg aactcgccac tttctcctcc ctctgagcga
                                                                   1980
                                                                   1998
gcgagtggcg cgcggggt
```

```
<210> 6037
<211> 7238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(7239)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (22)...(3101)
<223> similar to gi2224605 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400>,6037
ggcacgagaa agctcaagat ggcggacaaa acgccaggcg gatctcagaa ggccagttca 60
aagacgagat catcagatgt tcattcatct ggatcttcag atgcacatat ggatgcatct 120
```

```
180
ggacceteag atagtgatat gecaagtegg acaegaceta agageecaag aaaacataat
                                                                     240
tataggaatg aaagtgeeeg tgaaageett tgtgattete eteateagaa teteteaaga
                                                                     300
cctcttctgg aaaacaaact taaagcattc agtattggaa aaatgagtac agctaagcga
actttaagta aaaaggaaca ggaagaatta aagaaaaagg aggatgaaaa ggcagctgct
                                                                     360
                                                                     420
gagatttatg aggagtttct tgctgctttt gaaggaagtg atggtaataa agtgaaaaca
tttgtgcgag ggggtgttgt taatgcagct aaagaagaac atgaaacaga tgaaaaaaga
                                                                     480
ggtaaaatct ataagccatc ttcaagattt gcagatcaaa aaaatcctcc aaatcagtct
                                                                     540
                                                                     600
tccaatgaaa gaccaccatc tcttcttgtg atagaaacca aaaaacctcc acttaaaaaa
ggagagaaag aaaagaaaaa aagcaatttg gaactcttca aagaagaatt aaagcaaatt
                                                                     660
caagaggaac gtgatgagag acataaaaca aaaggcagat taagtcgatt tgaacctcct
                                                                     720
cagtcagatt ctgatggtca gcgtcgttct atggacgcgc cttcaagaag aaatagatca
                                                                     780
tetggtgtte ttgatgatta egeacetgge teacatgatg taggagatee aageactaet
                                                                     840
taatttttac cttggaaaca tttaatccac agatggantt gaagaaatgc tgttgccaag
                                                                     900
                                                                     960
aatttggaag atttggaccg ttagccagtg tgaaaatcat gtggcctaga actgatgaag
aaagagccag agagagaaat tgcggctttg tggcctttat gaatagaaga gatgctgaaa
                                                                    1020
gagctttaaa aaatttgaat ggaaaaatga ttatgtcttt tgaaatgaag ttaggttggg
                                                                    1080
gtaaagetgt acetatteet ecacatecaa tatacattee geettetatg atggaacata
                                                                    1140
cgcttccccc acctccatcc ggactgcctt ttaatgcgca gcctagagag cggttaaaaa
                                                                    1200
accetaatge teetatgtta eegecaeeta aaaacaaaga ggattttgag aagaetetgt
                                                                    1260
cgcaagccat agtcaaagtg gttatcccaa cagaaaggaa tttgctcgcc ctgatacatc
                                                                    1320
gaatgataga gtttgttgta cgtgaagggc caatgtttga agctatgatt atqaacaqaq
                                                                    1380
aaatcaacaa teetatgtte aggttettat ttgaaaacca gacaccagee catgtttaet
                                                                    1440
ataggtggaa gctttattct attctgcagg gagattctcc aactaaatgg cggacggaag
                                                                    1500
attitegtat giteaaaaat ggatettitt ggaggeeace accattaaat eegtaettge
                                                                    1560
atggaatgtc agaagagcaa gaaacagaag cttttgtaga ggaacctagt aaaaagggag
                                                                    1620
cacttaagga agaacagagg gataaattgg aagaaatctt gcggggatta actccaagga
                                                                    1680
aaaatgatat tggagatgca atggttttct gtcttaataa tgctgaagct gctgaagaaa
                                                                    1740
tagtggattg cattactgag tcgttgtcca tcttaaagac accccttcct aaaaagattg
                                                                    1800
ccagattata tttggtttct gatgttttgt acaactcttc agccaaagtt gctaatgctt
                                                                    1860
catattatag aaaatttttt gaaacaaagt tatgtcagat attttcagac ctcaatgcca
                                                                    1920
cctatcgtac aattcaaggc catttacaat ctgaaaactt taagcaacgg gtaatgactt
                                                                    1980
gcttcagagc atgggaagat tgggcaattt atccagaacc atttttgatc aaactacaaa
                                                                    2040
atattttctt aggacttgta aatattattg aagaaaagga aacagaggat gttccagatg
                                                                    2100
accttgatgg tgcccccatc gaggaagagc ttgatggtgc acctctggaa gatgtagatg
                                                                    2160
gaatteetat tgatgetact cccategatg atettgatgg agteectata aaaagtettg.
                                                                    2220
atgatgatct tgatggagtg cctttggatg caactgaaga ctcaaaaaag aatgagccta
                                                                    2280
tatttaaagt tgccccatca aaatgggaag ctgtggatga atctgaattg gaagcacagg
                                                                    2340
ctgttacaac ttctaaatgg gaattatttg accagcatga agaatcagaa gaagaagaaa
                                                                    2400
atcaaaatca agaagaagaa agtgaagatg aagaagatac tcaaagttcc aaatctgaag
                                                                    2460
aacatcattt gtactctaat ccaatcaaag aagaaatgac tgagtctaag ttctctaagt
                                                                    2520
actctgaaat gagtgaggaa aaacgagcca aacttcgtga aattgagctc aaagttatga
                                                                    2580
agtttcagga tgaattggaa tctgggaaaa gacctaaaaa accaggccag agttttcagg
                                                                    2640
agcaagtaga acactacaga gataaacttc ttcaacgaga gaaagagaaa gagttagaaa
                                                                    2700
gagaacgaga aagagacaag aaagataaag aaaaattgga atctcgctcc aaagacaaga
                                                                    2760
2820
ccagcccatc tcgcagtagc agtggtagac gagtgaaatc cccatcacca aaatcggagc
                                                                    2880
gatcagagcg ttcagaaaga tctcataaag agagctcacg gtccaggtca tctcacaaag
                                                                    2940
attctcctag agatgttagc aaaaaagcca aaagatcacc atctggttca aggacaccta
                                                                    3000
aaaggtctag gcgatcacgg tctagatctc ctaaaaaatc aggaaagaag tccagatccc
                                                                    3060
agtecagate tecacacagg teteataaaa agtecaaagg aaaaacaaac aetggeegta
                                                                    3120
aattttttaa gaaggctgtc acttattgga aatgcgattt gtttttgtgc cctgaacggt
                                                                    3180
ctgtttttta aaaaaacaaa aaaaatcaaa tgaaagagca ttccctgggg ttttttgttt
                                                                    3240
gtttgtgtat gcatgtgtaa actcatgagc aactgcatct gtagatctgt cattggttta
                                                                    3300
tattgtgtaa attactttca ttgtggctat ttctcaagat gaaattttta ttgttctaat
                                                                    3360
ggatttcgat cagaaatggt gtataatgga tctgctgaca gtgagtagta ttttgtttta
                                                                    3420
ggatgttgtg acttagcaaa aataatacag atgtcttccc cccttttgta gctttgacaa
                                                                    3480
tttgaattag atttcaaata aaatctgaac agaaaactat aatgttgttt ttttgcccca
                                                                    3540
```

```
coggratat taagtooctt aaagtootac tgagtttcac actactgttg tgcttottat
                                                                   3600
acctgatgca ctttataagc cccagtgttc aagtagctta agttttatat ttactaagat
                                                                   3660
gactatccaa attaagggac ctgagactcc tatttggtgg tttgctaacc atttgctttt
                                                                   3720
gataagtttc tcttgggtaa tactaatacc cagatatcaa agactaggta gatatggcat
                                                                   3780
ggcgttttgt tagtggaatg cctggctaaa acattttttt cacagaagca atatgatttc
                                                                   3840
catacatcca acccatgttc tgagcaacta cttactttta gggggaaatt aaatatcttt
                                                                   3900
tcatttcctc ttctattatg aaagaagttt atttgtaaaa caaattttct aacaaggttt
                                                                   3960
ggccatagaa ttctcttgta tgattgttga ccttttataa tcttctgtag gctatctttc
                                                                   4020
aaacactggc atcagaatat tttttataag tttgtgttta aacagcttag ttggtccccc
                                                                   4080
4140
gtttttcagg aaacttcgta tctaatggtt tgtaaattca aggtgcaaaa agttgattta
                                                                   4200
aaccatttgc agagttgaac tctattatga aaataaattt gctacggtat gaggaagaaa
                                                                   4260
taaaacttgt gtaatgttgg tcataatact gctataaata taataaaggg ttatgtagaa
                                                                   4320
ttgaactgac actattattt gtgaatcttg atttcagttt tttatgtagg cacttcatac
                                                                   4380
actggtttga tgggtttttt ttttcctccc taaaagagaa agtagaaaac tattctaaca
                                                                   4440
atggattatt ttgatttagc ttgcttttta aaaaaatctt ttcaacttgt tttacttaat
                                                                   4500
cttgcctagt cacaaaataa gatgtgcacc catggtttgg agagttccta tattagctga
                                                                   4560
gcagtgagat acactatttc caaacggtgc acacctacag tagctttgga aatgagccaa
                                                                   4620
teactgtttt acttaatggt tettateage atgeaaatat tgettgaaag ttattteett
                                                                   4680
attcactgtt ttgttagtcc attttgttag gaaacattaa ttcctaaaaa tttgttcaga
                                                                   4740
ataattaaaa gtgaacattt ggtgctgata ctcaaaaacc tacaaatgta gccatttaaa
                                                                   4800
aagtaacatg tttttctccc ctgctcattg cctgggagaa tggaatttta tataactacc
                                                                   4860
tttctttgca aaaataacgg tcgtgtcgag ttggtggtga ttttggcatt ccatcttgca
                                                                   4920
ctggtttcta gtataggctt ataaataatt ggtcaggtaa taatctttcc agtcaagttg
                                                                   4980
caagggatgc ttatttctct tcaaaaaaag acatcctgcg ggattgagta gaaaatttta
                                                                   5040
ggtcagtttt gggtgcttat ttgtaatatt tttcctacta cattggagtt tagcagttct
                                                                   5100
ttttttctgg atccagatac aagtgtcatg gtttatctta cagtgggtga aactgacttt
                                                                   5160
cttttggttg ggtgggtgag gatttcttag gcctgataga atatatattc tgtgaagttt
                                                                   5220
5280
agataggtta tttccagttt tacttcatga caaattacct agagtaaacc tacttaatac
                                                                   5340
tcccatggat tctatgaaag tttaatggga tcagaaattg gtgacttata agggggaaga
                                                                   5400
tattctacca tatttttata atagcttatt attcatgttt cttgtctgaa ggacactcaa
                                                                   5460
gttacagagc aaaatttcta taggttgact agaatgttca taagcatggt cttccagttg
                                                                   5520
caggaaagat catgttctat ctgtggacac ttactgtcct ctaccacagc tacgtgccag
                                                                   5580
agttgttttc cacagttctt ataaagggca tgacttaggc tctttaccct ccaacttaat
                                                                   5640
gtttatacac agggattgtt tactaggtta atgacattta actcccctct cttctgtagg
                                                                   5700
tgagagaaaa taagtaagtc ttgatctgtt tcttaccaaa gagagacaga cctatgatgg
                                                                   5760
aaaatgatca cgtctctgaa ttttttcttt aacgttatag ttccttatta cagatagtaa
                                                                   5820
gcatatggga atttctgagc tataacatgt tgagaagtta gaaattaaaa ctaacacaac
                                                                   5880
aaaaggcgct gaatcaaaag atctttgctt ttatttggct cagaatgttt ttggcttttc
                                                                   5940
tgctaaagat ggcagaaatt actctacaca gacctgattt ttctttattg cagaccattc
                                                                   6000
ttgtgggctt accetgagae ttttateeca attagtgaat ettggaggga ataettgett
                                                                   6060
atttatgact taggtatttc cccccaaact ttaatattct tgagcacttg aaaatacttt
                                                                   6120
tgagaaattt taactgtgat taaatttagg tttattagaa atattctgta cacatttqcc
                                                                   6180
tccatggtgg cgtaagttct gaaaaattat atgaccgtga caatagttta tcatcatcat
                                                                   6240
tattgttatt caaaataagg gtaaataaat ctctgtattg ccaaagtgac ttaaactgtt
                                                                   6300
ctgatgacca cacagtgtga tttctttagc agagaaagtt ggttttaaaa ataaatagta
                                                                   6360
ccacttttct aagactgtac agtttacaaa taaggttttt ttctttgttg ttttcctctt
                                                                   6420
ctattaagtt ttagtgaaaa gcctaattac agaaaattgt gcagatacta gtgaagatac
                                                                   6480
tagtataagt ttaaaggaac atgtgactgt aaaatctcac atttacaaag tgcttgatct
                                                                   6540
cttcatattt cacacgcatg ttttagaata gattttaggg agtgtttaat tcattatcct
                                                                   6600
tttgacttaa aatttttgtt accaacttcc taggacttag ataatatata aataagtaca
                                                                   6660
aatcccaggg gaagtgttgt gatgctagac taaaaggtgg gaatgtgctg ctgttccgtg
                                                                   6720
agccttgttc cattgttgaa aatttgatgc ctcagtgttt attcagtacc acctcatgga
                                                                   6780
gcttcaatgt aaatggatta tatgtataat tggtaatttg tatagttttg tagattgtag
                                                                   6840
attaaatgca ctcatcatgt cacatgtgat tgtgcttgga gtatttggtg gttttattct
                                                                   6900
tttactttca acggggttct tgtctgttac atctctggtg atttgaaata tcaggaaaga
                                                                   6960
```

```
cagtttgtca gaaatgagaa taatatagtt gaaatcagtt gggctaaaat attctacagc 7020 aagacaattt cttttgggtg aactgattct ataatttact tacttttaaa tgtaaggatt 7080 agatttattg ttgagctgct ttccagatca gactgtcact ttatagtttt tctatctcac 7140 agattctata gttgcaaaca aagcgttgtg aaatttccct tttgttgttt ttgactttta 7200 attaatacac agtacattgt tttcatagca aacttaaa 7238
```

```
<210> 6038
<211> 2036
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2037)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1810)...(1179)
<223> similar to gi5410328 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6038 taggctatac acctaattag aaagacaaac cacaacaccc ctccccaaac acctagtgcc 60 atgccagtta actcttccat ttcataaact caatggatag acaggaaggg aacaaagaga 120 ggaggaaaag cagaacatag aagtaaaaca gcaaatgaag gcatctggga cacattttag 180 ggaagagagc aaatgagggg ggaagacacc aattaactga cattggatag taggcagtta 240 gaacttatct ttccgtttac ctagcaagtt acatcagtgc tttatattaa acttgacaaa 300 cctactagtt tgtccctttc actcttaaat ataccatgag gtggttgggg agggagaagc 360 aaataaagca gcatgcaggg agacgcaagg aagaagtggc caaggagaag aaatggtggc 420 aggaatagtt ttaaatatca aggccactta aaacaagact cagcaaacca aagctatcac 480 ttctgcatta ccctttgtcc tcaattaact actttgaaaa ttacagccaa qcaaaccaca 540 aacattttaa tggtttatgt ttggatgata tgtctcctgc acatqcttcc accaqaacaa 600 aaaaggaaaa ccaaagaagt tcctttccac ataaggcaca qqacaaaatt aatcccattt 660 acatattcaa ggcgaaaatg agtgttttcc tggcttttqt ttqtttcttt tqctatcaca 720 tgtctataga ttatagggac tcaagcacat tatccatgac agaaaattcc actgttgtac 780 aaaataaaat tgttaattct aactttattc ttatacaatt tgcagaatag atttgaaatg 840 attgctatag gttttaatgt tgataagaac tgggacctat aatacaactg aaatgccagt 900 tgagctgagc caagtacatt ttaaaaaatga aagtcacaga catcgatttt tcctatacat 960 tttttttgtt tgaagaaaat ttatgataaa gtccagcaag cagtcacaga tggaaaggac 1020 caaataaaat agggtgggct tgggatagtt aaggatgagg aaacaaaaat atctqtttaq 1080 gagttaaaaa atgggacaga gtgggtttat tttggcagca agaagagaaa accggggtag 1140 tgggatggca actggatgga acaggagaat ggctcagcag cattttgctc cttccagcct 1200 ggtcacngcc tcctccactg gctgatatct acattttcac tgttggggct cctttaacag 1260 ggggtettte egaaggatat cettecaget aacgttgagg aacgecettt tecgatgttt 1320 aatatttgct tttgcactag tctcaaaaaa cctaatacca tgctcccttt gcaatctgtt 1380 etectitice titaggiaca acciettitg tegiceaata teacactiag tgtteetage 1440 aaccattctt tccaccatca ttcattggca tgctcatcct atgtttctaa agccatttgc 1500 ctgatgtttt caaaaccttt taaccattgg gtgatgtcat ataactagca tgatacccat 1560 tgcgcctctg tagtaggagg ttgtgatggt gtgaaatcgc tcctgggcct gctgtatccc 1620

```
<210> 6039
<211> 1773
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)...(1613)
<223> similar to gi5326764 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6039 60 geggeeegeg tegacegage geacgeegag ecegteegee geegeeatgg ecaceaeggt 120 gacctgcacc cgcttcaccg acgagtacca gctctacgag gatattggca agggggcttt 180 ctctgtggtc cgacgctgtg tcaagctctg caccggccat gagtatgcag ccaagatcat 240 caacaccaag aagctgtcag ccagagatca ccagaagctg gagagagagg ctcggatctg 300 cegeettgtg aageatteea acategtgeg tetecaegae ageateteeg aggagggett ccactacctg gtcttcgatc tggtcactgg tggggagctc tttgaagaca ttgtggcgag 360 420 agagtactac agcgaggetg atgccagtca ctgtatccag cagatcctgg gaggccgttc 480 tecattgtaa ecaaatgggg gtegteeaca gagaceteaa geeggagaac etgettetgg 540 ccagcaagtg caaaggggct gcagtgaagc tggcagactt cggcctagct atcgaggtgc 600 agggggacca gcaggcatgg tttggtttcg ctggcacacc aggctacctg tcccctgagg 660 teettegeaa agaggegtae ggeaageeeg tggacatetg ggeatgtggg gtgateetgt 720 acatectget egtgggetae ceaceettet gggaegagga ceageacaag etgtaecage agatcaagge tggtgcctat gacttcccgt cccctgagtg ggacaccgtc actcctgaag 780 840 ccaaaaacct catcaaccag atgctgacca tcaaccctgc caagcgcatc acagcccatg 900 aggecetgaa geaccegtgg gtetgeeaac getecaeggt ageatecatg atgeacagae 960 aggagactgt ggagtgtctg aaaaagttca atgccaggag aaagctcaag ggagccatcc 1020 tcaccaccat gctggccaca cggaatttct cagcagccaa gagtttactc aacaagaaag 1080 cagatggagt caagccccag acgaatagta ccaaaaacag tgcagccgcc accagcccca aagggacget teeteetgee geeetggage etcaaaceae egteateeat aacecagtgg 1140 acgggattaa ggagtettet gacagtgeca ataccaccat agaggatgaa gacgetaaag 1200 cccggaagca ggagatcatt aagaccacgg agcagctcat cgaggccgtc aacaacggtg 1260 actttgaggc ctacgegaaa atctgtgacc cagggcttga cctcgttgaa cctaaaacca 1320 1380 ttggcaaacc tggttgaagg aatggacttt ccacagattt ttactttcgg agaaccttgc ttggccaagg aacagcaagc cgatccacac gaccatcctg aacccacacg tgcacgtcat 1440 tggagaggat gccgcctgca tcgcttacat ccggctcacg cagtacattg acgggcaggg 1500 1560 ccggcccgc accagccagt ctgaggagac ccgcgtgtgg caccgccgcg acggcaagtg 1620 geagaacgtg caettecaet getegggege geetgtggee eegetgeagt gaagagetge gecetggttt egeeggacag agttggtgtt tggageeega etgeeetegg geaeaeggee 1680 1740 tgcctgtcgc atgtttgtgt ctgcctcgtt ccctcccctg gtgcctgtgt ctgcagaaaa acaagaccag atgtgatttg tttaaaaaaa aaa 1773

```
<210> 6040
<211> 3934
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3916)...(849)
<223> similar to gi4240173 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6040
60
ctgacccctt ccccaggagg ctcttgacga aactctaggg aagggcctgg ctccagccaa
                                                                    120
                                                                    180
gcaqqqqaca gtcagaagat gtcaacatgg atgccaggct ggtgggctcc gcccttctcc
aagcccccca tccaccccct ttgctcctcg gtgctacagg cactgccggg ttgaggggac
                                                                    240
                                                                    300
aggcagggca ggactgtggg catgcagagc ctcctggcag ccagggaggg ctgcccgccc
                                                                    360
ccctgcatct ggcgaggcag gcagctgtgt gcgcagtgat ggagctagga ggaggaaaca
                                                                    420
tgcgcagaca ccccgtgttc ccgcttcccc acgtggccag gagagtgttc aaacacgaac
                                                                    480
aaggatgget gggeaeteag ggeeecagee eecaaeecag gagaggaaga ggggggteee
geceteetgg ttettttgtt egteettaga tggatggtgt teteggtgee acteggeaga
                                                                    540
                                                                    600
aattetgeag aetgaggegg aggeeeggga ggagggegtg cateegeaga geeeacaggg
ctcggaccct ctgccccag cgacctccat tcgctacctg tcgggcagga tgcccagggg
                                                                    660
tgccgggcac ctgatctgga tccctggagt ggagggaccc tgtcttaagc cacactcggt
                                                                    720
                                                                    780
ggttctgccg cccagggcag gggtggactg taggctcccg acagcatgac aacagccgtg
acagtgtgcc tgccggctgg cgtgccttcc tttcctgccc accagggacg ccaaccagct
                                                                    840
                                                                    900
ctgcctcagc accaggggtc tcgggaggct cggccgcggc agagactgtc gctccgctgc
                                                                    960
caggegetigt ggatgagget caaggeatee tegaatttet tettgttgga ggetteetgg
                                                                   1020
ategeegtgt gggggaggte cacetgatag atggttttee acceagagtt cagtgeagae
agcaatcggt ccagttcaga agtgcagctc aggtagatga cccagggcgg gaggagctgc
                                                                   1080
                                                                   1140
tggctgtcct gggagaactc caagacgcag tactccttgc ccggctcggt ggagacggcg
                                                                   1200
ctgatgtcgc ccagcttggc tgtgcccaaa gagcggaaga agctggtctg gcaatcctca
tggcacgtaa agaggcggtc atccgtgagg accaggcagc agggtatgca ggggctggga
                                                                   1260
                                                                   1320
gctacgccct gggggatgac ccctttggac acagcctggc agagatgctg catccactcg
                                                                   1380
gecatetegg ectegetete ggeaettage tecaggeagg geggategga gagaatgace
tggaaggegt ggggeegate egtggtgttg geteteegge agecacegea etgeteeeee
                                                                   1440
cccatgttca ccgagagcag agggatgacg tcggtgcggt ccgggtactg gtagaggatc
                                                                   1500
                                                                   1560
ccgttgctga gcaccacgaa gcacgtcttc cagtgttcct tgcccaggta ggaggtgccc
gccttgtagt gcagcatgcc ttctttggtg atggtgccct cggggggtga gcagtggcag
                                                                   1620
ggcgtggggc ccagggactc gtctgtgggg tcctcccagt gcacaaggcc gtagaagcgc
                                                                   1680
acggtgacag cagatgcctc acacttcgat tcttgggcca caaatttggc cagtgccagc
                                                                   1740
ttctccatgg tggcatccgt caggatgctg gggtagggag gttctcgaca gcctttgatc
                                                                   1800
                                                                   1860
atggetgaet teaaagaage caaaaagaae teageeageg ceacateage egtgteeage
                                                                   1920
agaaactgct tcctgcggtt ggtgcacacc agcttcaccg tctgctggtc aaggccaacc
gacacatagt caagttcatt gtaagaaacg gcctcttcca ccaggtatgg cttctctgtg
                                                                   1980
gcccctttcc ggagcaggta gacatagcag tctgtgagca gcacgtacag cagctgcagg
                                                                   2040
                                                                   2100
ttgccctcca tgtgcccggt gctcatccgg atcattttga acagctgctc ttcgttttct
eggaacaegt ggateatgag eaggageagg tgattgttgt etaetetgaa eteegaggaa
                                                                   2160
tggaccatct ccgaagggct cccctgtccc tcatccaccc cagaatcctc agcgctactc
                                                                   2220
```

```
2280
agacacgggc tgggctggtc tcgcttgagc tggcagagaa cctcctgggt cccaggctct
ggctcagaca caggcccctc cctgaccagg gacagctggg cctccagctc ctgagcctcc
                                                                    2340
                                                                    2400
ctcgtggtat cctctagggg ccgaggcgtc tgtccctctc ctcctcctcc ctcttcttct
                                                                    2460
tggccagcag cctcagggct actaggaaca tgcagcggtt ggccaagccc tgcagggtca
tggtggccgc cacctgatgt aacagtgctt ggactctcga cggtaaagcg gtagaagtcc
                                                                    2520
attggggctg aaagcccctc actaaagtcg caaagcggcg gcctctccgg ggcatccccg
                                                                    2580
ggagagccgg tccgaaagga ctggtctggg ggctcagcac gggagcacca ggtgctgggg
                                                                    2640
                                                                    2700
tccagctgcc cgttgagctg gtcgataacc ttgctcaggg gctgccccaa gcgctccatg
gaggtgtcct tcatctcagg gatcagcagg cccggctcgg agcgctcgct gctctccgtg
                                                                    2760
                                                                    2820
gtgctgctcg gcccctctcc ctcctctgg ggggaggcaa gcatagtgtc tggcgagtcc
                                                                    2880
cgcccaaggc ttgggctgcc gttgcggctg tcaccgtccc cctgcttggc acatttcttc
tggctgcagg cggggtggag tggacttgcc tcctcatctg atctgctctt tttcttcttg
                                                                     2940
ccaattttct tettettggt gaccetgatg acctegaget cegtgeagge ateeggeggg
                                                                     3000
                                                                     3060
tccagggcct gggcctcctc cttctcctga gaggtggtgt gcacgggggt ggtgtcagag
gaggacacag tetetgeegg etectegttg aaggggttet ggegetgggt ggggeteetg
                                                                     3120
gtggaggcct tgctgctggt caggtcggag gctgtggagc ggggaccact gaccgtgtct
                                                                     3180
                                                                     3240
gtgaggtete catetteeca gtetgtgetg gggtacagae ggeaetgett ggaaacacat
ctccaaaatc ataatcctca ctagatgggg caatcgcact tgtcatccca ctccaggttg
                                                                     3300
gtggaggtga cggagttgaa agagttgagg gacagactgt ctgagccgtg gaccgagctg
                                                                     3360
                                                                     3420
ggaaaggcgt cttcaaagtc cagcaggtac tgaggtttgt agtagttcgg catgtagggg
gccaggtcta ggtaaggggc atccagatcc agctcgaaac gaatgaactc tagccccgac
                                                                     3480
accaaggtcc agaagagcgt caggtgatcg tggctgcaga ccagggcatt cttgacgtag
                                                                     3540
                                                                     3600
tacttatgca gcaggcccag gttctcctgg aacaaccgca ggtagctctc caaggagttc
                                                                     3660
tcgttgaggg ccaggtacag ccaggcacgg ctgcgcccca ggttggtggc cacgtgctgc
                                                                     3720
agcacctcga tctgcttgat ggcctctctc cgagtaaaat gcaccacgag cacccagtag
                                                                     3780
ccagaggaga ggtcttgcag tccgtacagc agggcgtggt ccaggtgctc acacagacgc
tgtaggacct tgtcatggtt ccggatggca gggatctcat cctcacatgc agcaaaatag
                                                                     3840
ctctgcaact tcttcaccga cagcgagatg ttctccagga tccggtcctt cacctccccc
                                                                     3900
                                                                     3934
ggctccatgg cgctgccacc gtcgccgcac gaaa
```

```
<210> 6041
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (131)...(330)
<223> similar to gi5726234 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 6041

ttaaaaacaa tgtcttctgt tcatgcaaat gtctttaata aagaaggaag gatttgttgt 60
aactctctga agacatgcac aatctgaggc tccgaaagtg tccaaattct gttctctgga 120
ttcaagatga ctgaggcttg agccgagctt tcgctcacca tccaacactg ctgtttgccg 180
ccgtcgcaga cccaccgctg acttccaccc ctctggatat cgcagggtgt cggctgcgct cctgatccag cgagggccc attgctgctc tggatagggc taaaggcttg ccattgttcc 300
cgcacagcta agtgcctggg ttcatcctaa tcaagctgaa cgctggttgc tgggttccat 360
ggttctcttc catgaccac cacttctaat agagctgtaa cactcac 407
```

```
<210> 6042
<211> 6355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6356)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (463)...(4366)
<223> similar to gi2224557 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6042 atteggeaca gggaggeeat eaggggetgg gaeagttegg ttattgaeae tecaagaatt 60 aggaagcaga catgaccttt tagtgccaca aaagatgaat tggctgaatt atctgaagct 120 gaaagtgaag gagatgaaaa gcccaaactc cggagaccct gtgaccgttc caatggctat 180 ggaagaactg aatgetttaa agttgagaaa aacetgetag tttatgggtg gggeegatgg 240 agagagatto tatotoatgg cogtttoaaa aggoagotaa atgaacacga tgtagagata 300 atttgccgag ctctcttagc atattgcctt gttcactacc gaggagatga gaagattaaa 360 ggtttcatat gggatctcat tactccaact gaagatggac agacacgaga gctacagaat 420 catctaggcc tatcagctcc tgtacccagg ggtcgaaaaag ggaagaaagt aaaaactcaa 480 acaagctcat ttgatataca aaaagcagaa tggcttcgaa aatataatcc cgaqcaqctc 540 cttcaagatg aaggctacaa aaaacatata aaacaccact gtaataaggt tttgcttcqt 600 gtgagaatgc tgtattatct aaagcaagaa gttattggaa atgagtgtca gaaagtattt 660 gatggagttg atgcaagtga cattgatgtt tgggtaccag aaccagacca ctcagaagtt 720 cctgctgagt ggtgggattt tgatgctgat aagtcactcc ttattggagt ttttaaacat 780 ggatatgaaa aatataacac tattcgagca gacccagcat tatgcttctt ggaaagagtg 840 ggaaaacctg atgagaaagc agttgctgct gaacagagag cgaatgatta tatggatggg 900 gatgtggaag atccagaata caaacctgcc ccagccatct ttaaagatga tatagaggat 960 gatgtttcct caccaggaga tcttgttata gcagatggag atggtcaact gatggagggt 1020 gataaagtat attggcctac tcaatcagct ttaaccacac gtttgaggcg tctcatcact 1080 gcataccage gtactaataa aaacagacaa attcaacaga tacaaccgac tttctcggtg 1140 cctaccagtg taatgcagcc tatttatgag gaagccactc ttaatcctaa aatggcagcc 1200 aagatagaaa gacagcaaag atggacaaga agagaagaag ctgactttta tagggttgta 1260 tetacatttg gagtggtttt tgaccetgac agaggecaat ttgattggac aaaatttaga 1320 gctatggcta ggctacataa gaaaactgat gatatgtttg gaaaaatatt tgtacgcatt 1380 catgtccatg tgtcggaggg tttgtccgtc ttccttccaa aagaagaatt ggtggatcca 1440 aatattttta tccagcccat cacagaagaa cggtgcttct aggactttgg tatcqcattg 1500 aacttctaag gaaagtacgg ggnacaggcc cttcgacatc cacagttgtt tgaacgcttg 1560 aagctttgcc atccaaatcg cagatttacc agtctggtgg gaatgtggcc ctcatgatag 1620 ggatttgctt attggtgctg ccaaacacgg ggtgagccga acagactatc acattcttcg 1680 tgatcctgaa ctctcattta tggcagctca gaggaactac agtcaaagta agatggctca 1740 ttcaaggact tctaccccac ttctacagca atatcaagta gcactttctg cttctcctct 1800 tacctctcta cctaggctcc tagatgctaa aggtattatt ctagaggaga tgaaagttaa 1860 aagtgaaaac cttaaagagg agcctcagtc ttctgaagaa gaatctatgt cttctgtgga 1920 aaccaggaca ctgataaaat ctgagcctgt aagtccaaag aatggtgttt taccacaggc 1980

```
2040
tactggagac cagaaatctg gtggaaaatg tgaaacagac agacgcatgg ttgcagccag
aacagaaccc ctaactccaa acccagcttc taagaaacca agagtccaca aaaggggatc
                                                                     2100
agaatctagt totgattotg actoagatto tgagagatca tottgttott coagatcato
                                                                     2160
                                                                     2220
ttetteetea teateetett ettgeteeca etetegatea ggetetagtt ettetteate
tteatettqt tetteageat ettetteate etetteetee acetetteet ecteeteete
                                                                     2280
ctcttcatct tcatcagaag aaagtgacag tgatgaagaa gaagcccaaa aacgagaaag
                                                                     2340
tactactcac atgaaagcct atgatgaaga aagcgtcgcg tcactgagca ctacccagga
                                                                     2400
tgagactcag gatagttttc agatgaacaa tgggacacca gagtctgctt atatcttaca
                                                                     2460
                                                                     2520
aggtggatat atgctggcag cctcgtattg gccaaaggat cgtgtgatga tcaataggtt
ggacagtatt tgtcaaacag ttctgaaagg aaagtggcct tcagctagaa gaagttatga
                                                                     2580
tgctaacaca gtggcttctt tctataccac aaaactgctg gacagccctg gagcagctac
                                                                     2640
agaatacagc gagcccagtg tacccactcc cccaggtgcc ggtgttaaag aagaacatga
                                                                     2700
tcagtcaaca cagatgtcaa aggaaggtgg tttgaagttg acatttcaga agcaagggct
                                                                     2760
tgctcagaaa agaccatttg atggtgaaga cggtgctctg gggcagcagc agtacctcac
                                                                     2820
teggettega gagetteaaa gtgeateaga gaceageete gteaatttee caaaateeat
                                                                     2880
accagtatca ggtacttcca ttcaaccaac ccttggtgcc aatggtgtga tattagacaa
                                                                     2940
ccagcctata gtcaaaaaaa ggcgaggaag gaggaagaat gtagaaggtg ttgacatctt
                                                                     3000
ettttttaac agaaataaac cacctaatca tgtttcttta ggettaacct cetcacagat
                                                                     3060
ttccacaggg ataaatccag cactatccta tactcaacct caaggaattc ctgatacaga
                                                                     3120
aagtccagtt ccagttatta atcttaaaga tggaacgaga cttgcaggag atgatgcacc
                                                                     3180
aaagagaaag gatttggaaa aatggcttaa ggagcacccg ggttatgtgg aagatttggg
                                                                     3240
agettttatt cetagaatge agetteatga gggaagacee aaacaaaaaa gacacegttg
                                                                     3300
cagaaacccc aataaactag atgtgaatag tctcactgga gaagaacgtg ttcaactgat
                                                                     3360
taacagaaga aatgctagaa aggttggagg tgcatttgct ccccctttga aagatttatg
                                                                     3420
tagattccta aaagaaaatt cagaatatgg agtagctcct gaatggggag atgttgttaa
                                                                     3480
gcaatctgga tttcttccag aaagcatgta tgaacgtatt ctcactggtc ccgttgtgag
                                                                     3540
agaggaagta agcaggcggg ggagacggcc taaaagtgga attgcaaagg ccacagcagc
                                                                     3600
agcagetget geatetgeea ceagtgttte aggeaateet ttgttageea atggaetaet
                                                                     3660
tecaggtgtg gateteacaa etetteagge ettacaacaa aacetacaaa aettgeagte
                                                                     3720
actgcaagta actgctgggt tgatgggaat gcctaccggc cttccttctg gaggagaagc
                                                                     3780
taaaaacatg getgetatgt teeceatget getgteagga atggetggat taccaaatet
                                                                     3840
gttgggcatg ggaggactcc tgacaaagcc tacggaatct gggacagaag acaaaaaggg
                                                                     3900
aagggactet aaggagteag aaggaaaaac agaaaggaca gagageetaa gtteagagaa
                                                                     3960
tggtggagaa aactctgtgt caagttctcc ttccacatcc tctactgctg cattaaatac
                                                                     4020
agctgcagct gccaacccat tagctcttaa cccactatta ctatctaata tactttatcc
                                                                     4080
agggatgett eteaeteeag ggeettaate tteatattee aaetttgtee eagteeaata
                                                                     4140
cttttgatgt acaaaacaaa aacagtgact taggctcgtc taagtctgta gaagtaaaag
                                                                     4200
aagaagattc cagaattaaa gatcaggaag acaaaggagg aactgaacca agtcctctca
                                                                     4260
atgaaaacag cacagatgag ggttcagaga aagctgatgc ttcatctgga tctgatagta
                                                                     4320
catcgtcgtc atctgaggat tcagattcta gtaatgaaga ctgattccca gactctgcac
                                                                     4380
ttaaaatatg aactgatttt ggattttttc tttaataatt aattgtaaat accccagtgt
                                                                     4440
tgagtgcatc aataacttac tggaccgaac attttcagtt aatttggttt aggagtgcaa
                                                                     4500
actgctttca gagacttttt gcatgtaata tttcttaaga ttcataagtt tctgaactcg
                                                                     4560
tatgtactat caaatacata aaggtgtaaa attacaacaa aaggcattat aattttgttg
                                                                     4620
ggggttaatt ttatgaaaat tatgctcaat aagagttgta tatttaatat atttgcagtg
                                                                     4680
aacacagaat actttatgca tattactgat ttaatttgaa tatagtttta cagcctcctt
                                                                     4740
gacacctata atttacagat caaaactcag caataatttg ggcagctaat gaatgtcatg
                                                                     4800
aaagctgtag aatctacatc accatccatt gctttaatta catgaaaatg ctctagtgtt
                                                                     4860
gtgatgcact gctgatgttt ccaattcagg tacaagtatg ttttaaagaa gaaataagtt
                                                                     4920
tcccaatcag ccaatttaac tggctacctg ttacctcagc tgagttagtt taggaagttt
                                                                     4980
acattegttt ctaattetat acttgtttte aggggttttt tttaaacaca tectatatat
                                                                     5040
catgicaatc tggcaagaaa tatgacttgc tttttgctga gcttaattca gatatcagta
                                                                     5100
aaattaagtc ataaaataat catgtgtcat gtgactttgg caccctatag acatacttag
                                                                     5160
ttttaacttt tcaaagtttg gcctcctatt aaaaataatc atgcctcaca tgagtaatgt
                                                                     5220
ctgtttccag ggttcagaaa aggcaaactc atgaaatgcc actgaaaaga actttcaaca
                                                                     5280
cagcatactt catgtaaaag aaattgtttg tttgctttct ttgtgtagat ttctatttgt
                                                                     5340
gttttatgtc atggaaatat tccagaatta acagataata gtggtaaagt aatatgcaga
                                                                     5400
```

```
5460
tagtctaaat tcattttgag tttctaggtg taagcagact aaatgttgcc cagaatcagt
                                                                     5520
gttgggttat cagtttatat taaatatact gagttgcccg ttttgaaaat gcactttgaa
taatctcaaa aagatgtaca agttatacct gtaaaccaca aaagtgaagc ctgaggcttc
                                                                     5580
                                                                     5640
tgttcaattt catagactcc tttaccatgt aaaatttgtc tgatatttga tttgtgatac
aatttctcct gctaaagctg ctattattct gacaaggtag aggtccaggt tcacctttat
                                                                     5700
                                                                     5760
atatatttaa aacaattagt actgaattgg acataaaaaat attgacattc taaggagaga
                                                                     5820
tatatgttag catttttctg gtactcaaat aagttagtag taaagtctgc aagggcataa
                                                                     5880
atttaggggg aaaaagtgtc ccagttctct cctacagaaa aaatactttc agtatgtttt
                                                                     5940
gataaaactg ttgctttgtc atgagttagt caattgtatc aggttttcca agacctttac
                                                                     6000
cagtaaatta tgtttctgta tgtaaaataa ccccttatta gagagacagt gttatatgta
                                                                     6060
tttacaaaat tatataagtt ccattgggat tgtattgatt ttgtattttc ccaaaatagt
                                                                     6120
actitigaatt gatagteett tatgeaatgt ettageaata gtetetataa tgeecateea
ggagaagtgg gtagtaattc ttcatcatga aaatgatata ttacatattt agtatcttcc
                                                                     6180
ctttgcagta ttgcactttt gtttaactag aatacaccta tgagatagcc aaagtttcaa
                                                                     6240
acacagttat cttagtttac cggtggagta tttcaacacc aaccacattt cccttcctcc
                                                                     6300
                                                                     6355
ctctaattct acccacatga tctttattcc ttcctttcgc caattaaaaa aaaaa
```

```
<210> 6043
<211> 5539
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (87)...(4494)
<223> similar to gi35568 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6043 tttcgtattg gctttcaggc tggcgcctgt ctcggccccc gcgccagttt tgggctggtt 60 ggcgcggaat cgggagattc gggaccatgg cacctgtgca cggcgacgac tgtgagatag 120 180 gggcgagtgc tctgtcagat tcagggagtt ttgtatcttc tcgagcccgg cgagaaaaaa aatcaaagaa ggggcgccaa gaagccctag aaagactgaa aaaggctaaa gctggtgaga 240 300 ggtataaata tgaagtcgag gacttcacag gtgtttatga agaagttgat gaagaacagt 360 attegaaget ggtteaggea egeeaggatg atgaetggat tgtggatgat gatggtattg 420 gctatgtgga agatggccga gagatttttg atgatgacct tgaagatgat gcccttgatg ctgatgagaa aggaaaagat ggtaaagcac gcaataaaga caagaggaat gtaaagaagc 480 tcgcagtgac aaaaccgaac aacattaagt caatgttcat tgcttgtgct ggaaagaaaa 540 600 ctgcagataa agctgtagac ttgtccaagg atggtctgct aggtgacatt ctacaggatc 660 ttaacactga gacacctcaa ataactccac cacctgtaat gatactgaag aagaaaagat ccattggage ttcaccgaat cetttetetg tgcacaccge cacggcagtt cettcaggaa 720 780 aaattgcttc ccctgtctcc agaaaggagc ctccattaac tcctgttcct cttaaacgtg 840 ctgaatttgc tggcgatgat gtacaggtcg agagtacaga agaagagcag gagtcagggg 900 caatggagtt tgaagatggt gactttgatg agcccatgga agttgaagag gtggacctgg 960 agectatgge tgecaagget tgggacaaag agagtgagee ageagaggaa gtgaaacaag 1020 aggeggatte tgggaaaggg accgtgteet acttaggaag tttteteeeg gatgtetett gttgggacat tgatcaagaa ggtgatagca gtttctcagt gcaagaagtt caagtggatt 1080 1140 ccagtcacct cccattggta aaaggggcag atgaggaaca agtattccac ttttattggt tggatgctta tgaggatcag tacaaccaac caggtgtggt atttctgttt gggaaagttt 1200 ggattgaatc agccgagacc catgtgagct gttgtgtcat ggtgaaaaaat atcgagcgaa 1260

```
1320
cgctttactt ccttccccgt gaaatgaaaa ttgatctaaa tacggggaaa gaaacaggaa
                                                                     1380
ctccaatttc aatgaaggat gtttatgagg aatttgatga gaaaatagca acgaaatata
                                                                     1440
aaattatgaa gttcaagtct aagccagtgg aaaagaacta tgcttttgag atacctgatg
                                                                     1500
ttccagaaaa atctgagtac ttggaagtta aatactcggc tgaaatgcca cagcttcctc
                                                                     1560
aagatttgaa aggagaaact ttttctcatg tatttgggac caacacatct agcctggaac
                                                                     1620
tgttcttgat gaacagaaag atcaaaggac cttgttggct tgaagtaaaa aagtccacag
                                                                     1680
ctcttaatca gccagtcagt tggtgtaaag ttgaggcaat ggctttgaaa ccagacctgg
                                                                     1740
tgaatgtaat taaggatgtc agtccaccac cgcttgtcgt gatggctttc agcatgaaga
caatgcagaa tgcaaagaac catcaaaatg agattattgc tatggcagct ttggtccatc
                                                                     1800
acagttttgc attggataaa gcagccccaa agcctccctt tcagtcacac ttctgtgttg
                                                                     1860
                                                                     1920
tgtctaaacc aaaggactgt atttttccat atgctttcaa agaagtcatt gagaaaaaga
atgtgaaggt tgaggttgct gcaacagaaa gaacactgct aggttttttc cttgcaaaag
                                                                     1980
ttcacaaaat tgatcctgat atcattgtgg gtcataatat ttatgggttt gaactggaag
                                                                     2040
                                                                     2100
tactactgca gagaattaat gtgtgcaaag ctcctcactg gtccaagata ggtcgactga
agegatecaa catgecaaag ettgggggee ggagtggatt tggtgaaaga aatgetacet
                                                                     2160
gtggtcgaat gatctgtgat gtggaaattt cagcaaagga attgattcgt tgtaaaagct
                                                                     2220
accatctgtc tgaacttgtt cagcagattc taaaaactga aagggttgta atcccaatgg
                                                                     2280
aaaatataca aaatatgtac agtgaatctt ctcaactgtt atacctgttg gaacacacct
                                                                     2340
ggaaagatgc ccaagttcat tttgcagatc atgtgtgagc taaatgttct tccattagca
                                                                     2400
ttgcagatca ctaacatcgc tgggaacatt atgtccagga cgctgatggg tggacgatcc
                                                                     2460
gagegtaaeg agttettgtt getteatgea tittaegaaa acaactatat tgtgeetgae
                                                                     2520
                                                                     2580
aagcagattt tcagaaagcc tcagcaaaaa ctgggagatg aagatgaaga aattgatgga
                                                                     2640
gataccaata aatacaagaa aggacgtaag aaaggagctt atgctggagg cttggttttg
                                                                     2700
gaccccaaag ttggttttta tgataagttc attttgcttc tggacttcaa cagtctatat
                                                                     2760
ccttccatca ttcaggaatt taacatttgt tttacaacag tacaaagagt tgcttcagag
                                                                     2820
gcacagaaag ttacagagga tggagaacaa gaacagatcc ctgagttgcc agatccaagc
                                                                     2880
ttagaaatgg gcattttgcc cagagagatc cggaaactgg tagaacggag aaaacaagtc
aaacagctaa tgaaacagca agacttaaat ccagacctta ttcttcagta tgacattcga
                                                                     2940
cagaaggett tgaageteac agegaacagt atgtatggtt geetgggatt tteetatage
                                                                     3000
                                                                     3060
agattttacg ccaaaccact ggctgccttg gtgacataca aaggaaggga gattttgatg
catacgaaag agatggtaca aaagatgaat cttgaagtta tttatggaga tacagattca
                                                                     3120
attatgataa acaccaatag caccaatctg gaagaagtat ttaagttggg aaacaaggta
                                                                     3180
aaaagtgaag tgaataagtt gtacaaactg cttgaaatag acattgatgg ggttttcaag
                                                                     3240
tetetgetae tgetgaaaaa aaagaagtae getgetetgg ttgttgagee aaegteggat
                                                                     3300
                                                                     3360
gggaattatg tcaccaaaca ggagctcaaa ggattagata tagttagaag agattggtgt
                                                                     3420
gatettgeta aagacaetgg aaactttgtg attggecaga ttettetga teaaageegg
gacactatag tggaaaacat tcagaagagg ctgatagaaa ttggagaaaa tgtgctaaat
                                                                     3480
ggcagtgtcc cagtgagcca gtttgaaatt aacaaggcat tgacaaagga tccccaggat
                                                                     3540
taccctgata aaaaaagcct acctcatgta catgttgccc tctggataaa ttctcaagga
                                                                     3600
ggcagaaagg tgaaagctgg agatactgtg tcatatgtca tctgtcagga tggatcaaac
                                                                     3660
ctcactgcaa gtcagagggc ctatgcgcct gagcagctgc agaaacagga taatctaacc
                                                                     3720
attgacaccc agtactacct ggcccagcag atccacccag tcgtggctcg gatctgtgaa
                                                                     3780
ccaatagacg gaattgatgc tgtcctcatt gcaacggggt gggaactttg accccaccca
                                                                     3840
atttaaagtt catcattatc ataaagatga agagaatgat gctctacttg gtggcccagc
                                                                     3900
acageteact gatgaagaga aatacaggga etgtgaaaga tteaaatgte eatgeeetae
                                                                     3960
atgtggaact gagaatattt atgataatgt ctttgatggt tcgggaacag atatggagcc
                                                                     4020
cagcttgtat cgttgcagta acatcgattg taaggcttca cctctgacct ttacagtaca
                                                                     4080
actgagcaac aaattgatca tggacattag acgtttcatt aaaaagtact atgatggctg
                                                                     4140
gttgatatgt gaagagccaa cetgtegeaa tegaactegt cacetteece tteaattete
                                                                     4200
ccgaactggg cctctttgcc cagcctgcat gaaagctaca cttcaaccaq aqtattctqa
                                                                     4260
caagteeetg tacaeeeage tgtgetttta eeggtacatt tttgatgegg agtgtgeaet
                                                                     4320
ggagaaactt actaccgatc atgagaaaga taaattgaag aagcaatttt ttacccccaa
                                                                     4380
agttctgcag gactacagaa aactcaagaa cacagcagag caattcttgt cccgaagtgg
                                                                     4440
ctactccgaa gtgaatctga gcaaactctt cgctggttgt gccgtgaaat cctaagggaa
                                                                     4500
tcccaggagt aaccaaggag ggggtagttg aaaaatccca gcttcctctg tgcctccact
                                                                     4560
ctggccctaa atgctcctcc agcatctgtt tctcccttgg gactgtgtct catgtttgtg
                                                                     4620
tgaatgtaga ccaggaaagg gggctgcaaa aatgttgagt ctaatgttcg taagcatcat
                                                                     4680
```

```
4740
agaaatteet gtetteatat taagatgtae tgetttaaaa cacaaeteea gageeeetee
                                                                     4800
ccaagctccc ctccccaagc tcctgaagac ccggtttctg agggagggaa attgctactt
                                                                    4860
ggattgagag tagctggaat gtaagtgacc ccaggetttg cctcagggcc tttagcctat
                                                                     4920
gtccccccca cataaagaga gcttctcaga gcctgactga agagctgacg ttttgctttt
tcatatgcca attaaacccg gtctaaatcc aaatgcttct ccagccatcc aggagtggct
                                                                     4980
                                                                     5040
qtccttttca gtcttgtctt ttatataggt agctgagggg gaagatttag aagccttgca
                                                                     5100
ctcactaaat agattaaaca gagcaggctt gtttgttgaa ttgctccaaa gtccaacaga
cacacactga gcaggtgttt tacactcaca ttcccttttt tgccccttaa atagaaagtg
                                                                    5160
                                                                     5220
caqqtaaagg tttatacaac aagaaagcac attgaaaata atttgatact ctaacaatcc
attaacatgt gtaggggtta cggtgaggat cactgtgttg tattcagaaa aacggggaga
                                                                     5280
gggatgctta attggccctg gcgcttgcta tttttttctc atttcttcac aataggaccg
                                                                     5340
                                                                     5400
tctttggcag cagcaaaatg tatttcagta tggcagtctt tcctctctta cattattggt
aagattatac taacaaaatg tttccccttg tacaattatg ctgtgttttt aaaaaacatt
                                                                     5460
gacctgtgtg tttttataaa agaaaaagta tgttgtgcct tcttcttaag aataaagttt
                                                                     5520
                                                                     5539
tctaaaggga aaaaaaaaa
```

```
<210> 6044
<211> 1123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (837)...(139)
<223> similar to gi2613010 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6044
                                                                       60
tttttttttt qtatttgtag aaaaccttta atgttcccca ggctgaggga gccctgtgag
ccagctaaaa acccccactg tgaagtccct gccatgtccc agcagtgtgg agtggcatgg
                                                                      120
ggcttcatcc tgactgtcag aggctgaagc cactaccatc tcctcgaatg cgactccccc
                                                                      180
                                                                      240
agecagaact ggeetgetee tggteateea gggagggeag agagetgegg gtaecaggat
                                                                      300
gteggeagee agggtgeagg teecageaeg ggggeeeetg agaeageeea ttggaaetgg
                                                                      360
gaggetggeg gtteteaatg accaggteae tgetgteate gteaetatea ggeteageag
geccaggece tgeagaggga ggaeetgtea aacgeecaga tgeecetege accaegttat
                                                                      420
                                                                      480
tgcgctggtt ggcgggcttg acagtgacaa tgagggttat ggctgttggc aaccatcatg
teegteactt ggtteaaagt etteeetget actteaatge eattgacete gaggatetea
                                                                      540
tcactgaccg ccagcagccc tgtactctca gccagacccc cacgtaccag gcgggagatg
                                                                      600
                                                                      660
aagatteetg gaaccegete cagggeeetg gggageeaca cgcacgetea tgecateteg
                                                                      720
gatgtagaag cccagggggc ggtctgaacc atgcttgtgc agccgcaccc gtcggtgggt
                                                                      780
ctcaggcagt aggtccacgt ctatgactga ggaaacctgg cggaaatctt ggggcaggct
                                                                      840
gattagcaag ggtggccggg tgcgcagggg tgccactggc cgcagcaaga gccctttctt
gegeegetge agagagttgg aggeaaaage caggeegetg gagteagett ecegettetg
                                                                      900
caccagtagg cgcagtggcg gggcccgctg ccagggcccg gtgcaggctg tcgtcgttgg
                                                                      960
                                                                     1020
tgaggggcag caggtcgcca tgagcatccg tatagccaag tagcacgtcc aggcccggga
                                                                     1080
tetgtgeace geeegeagea aeegegagaa eteetgaage egeteacega ageegaggea
                                                                     1123
ggcgaagcgt cggaactcgg cgtcaaattg ctcttcacct cga
```

```
<210> 6045
<211> 2213
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1792)...(178)
<223> similar to gi4210363 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6045 ttttttttt ttaactaaaa tggtcacttt taatgggaac cagaggtata gttacaatta 60 catagtccga cacaaaaaaa cccttgggtg atcaggaatt ggaaggttac aaaataacga 120 gggtaacact gggtacagga caaaaagctg ttccagaacc tggggagcca ggctaattaa 180 tacggcetet ecetgegate etgtetgtge teacceetgg aatecatett geeagggeea 240 aagecacete tgteeceaee acceeggeee ceteggaage etecaeggte eeegeegegg 300 ccccggtagc cgcctcgatc atagcctcct ctgccaccac gacgatcatc cccgtagtta 360 cccccatgt gagagccacc tggtccccct cctgggccat ctggtttagg ggccttacac 420 tggttgcatt cattcctcca agagaagttc atattctcac aggtgggatt aggacacttc 480 cagtcaccag ctcgctgctg tcctccaccg ccaccacctc cactgggaaa tcctcctcgg 540 ccaccaccac cactgccacc acctccatag cctccacggc ccatgggtcc tcctcgccct 600 cggcctccac gaccattgcc accacccga ttaaagtctg cccggcgagt agcaaatgag 660 accttgatag gatttccgga gaattcttta ccatcaaacc agtcaatagc tgctttagct 720 gaaggtgggt catcaaaaga gaccgttgcc tctcccttca gcttgccagt ttccctgtct 780 gtgtacaaat taatcatggg ctgtcccgtt ttcttgtttg tcttaataat accaatctgc 840 ttgaagtaat cagccacaga ctcaattgta acattctcac ccaggccttg cacaaagatg 900 gtgttgttgt ctgaattatc ctgttcggag tcatgacgtg atccttggtc ccqaqqqcca 960 ccaaatttat tgaagccacc acggtcactt ccgcccatgc cacctctgcc tccacggcca 1020 cetecaegae etetgggtte atagecaeca etgetgeggt tgtaaceage agegeegeeg 1080 egageegeeg ceaceactge cacecetgea geggeeteea eggteetgge tgtegatage 1140 cacggetgee agetgeacca gtetggtett gattgecata accaccacca ccaccactge 1200 egeegeegee gecaecteeg eegeeaeeae cactaceaet catggaggat tgatettgge 1260 catagctacc tecaecteca ectecaecte caccaccact getgetgttg tactggttet 1320 getgtecata geetegaggg ggattatage tttgetgetg tecatagett tgetgetgte 1380 caccataget aggetgetgg etgtagetee cactetgggg etgeecatag etgetgetet 1440 gagaactgct accgtaactt cccgaggtgc tgctgggagc tggctgctgg ccatagccag 1500 gataggagga ctgctgcccg taagacgatt gggagctctg gctactgcca tagccgccag 1560 tegageeata teeetgggga gttgaetgag tteeataget gttetggete tggeeataag 1620 aagaataget getetggeea tageetgaag tgteegtgga etggetataa eeactgtaae 1680 tetgetgtee gtagggetga etgetetget gggaatagee etgeeeggge tgggtggggt 1740 aggccccata gctttgggtt gcttgttggg tataatcgtt tgaggccatg tccgcgcacg 1800 egegeacagg caagcaagca acgaagttee aacacegetg agcacegacg cetggaggae 1860 tgagcagece egecteetge gtegaagett aagtaegete egeegeetae geacegegea 1920 ggcgcgcacc aaacgcggaa gagcaggggg aggcaggaac gcactccgcc cccttcgtag 1980 ggcaggtaga gggtccgagc aggcagaagg gaaacaagtt aactagaatc atgcgaatac 2040 tatacataat catattttt gaggaagaac cectetetee teggeaggae tageecaega 2100 tetateteca eccecatgaa ggeacagtgg taeggeetga gtgeeegetg ggggegggge 2160 gagggggggg tcccggcggc tggggacgaa actggagtca cagccgggga gag 2213

```
<210> 6046
<211> 1943
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (169)...(1601)
<223> similar to gi1504042 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6046
tcatcataac ttatgttcca tattttttaa cccacatcac tcttgaaatc gactgttcag
                                                                       60
ttgatgtgca ggcttttaca ggataagcgc taccagtgtg tctattcctt ggcagaaatc
                                                                      120
tttaaggtcc tggcttcatt ttatgtcatt ttggttatac tttatggtct gacctcttcc
                                                                      180
tacagcctgt ggtggatgct gaggagttcc ctgaagcaat attcctttga ggcgttaaqa
                                                                      240
gaaaaaagca actacagtga catccctgat gtcaagaatg actttgcctt catccttcat
                                                                      300
ctggctgatc agtatgatcc tctttattcc aaacqcttct ccatattcct atcaqaqqtc
                                                                      360
agtgagaaca aactgaaaca gatcaacctc aataatgaat ggacagttga gaaactgaaa
                                                                      420
agtaagettg tgaaaaatge ecaggacaag atagaactge atetttttat geteaacggt
                                                                      480
cttccagaca atgtctttga gttaactgaa atggaagtgc taaqcctqqa qcttatccca
                                                                      540
gaggtgaage tgccctctgc agtctcacag ctggtcaacc tcaaqqaqct tcqtqtqtac
                                                                      600
cattcatctc tggtcgtaga ccatcctqca ctqqcctttc taqaqqaqaa tttaaaaaatc
                                                                      .660
ctccgcctga aatttactga aatgggaaaa atcccacgct gggtatttca cctcaagaat
                                                                      720
ctcaaggaac tttatctttc gggctgtgtt ctccctgaac agttgagtac tatgcagttg
                                                                      780
gagggctttc aggacttaaa aaatctaagg accetgtact tgaagagcag cetetecegg
                                                                      840
atcccacaag ttgttacaga cctcctgcct tcattgcaga aactgtccct tgataatgag
                                                                      900
ggaagcaaac tggttgtgtt gaacaacttg aaaaagatgg tcaatctgaa aagcctagaa
                                                                      960
ctgatcagct gtgacctgga acgcatccca cattccattt tcaqcctgaa taatttqcat
                                                                     1020
gagttagacc taagggaaaa taaccttaaa actgtggaag agatcattag ctttcagcat
                                                                     1080
cttcagaatc tttcctgctt aaagttgtgg cacaataaca ttgcttatat tcctgcacag
                                                                     1140
attggggcat tatctaacct agagcagctc tctttggacc ataataatat tgagaatctg
                                                                     1200
cccttgcagc ttttcctatg cactaaacta cattatttgg atctaagcta taaccacttg
                                                                     1260
accttcattc cagaggaaat ccagtatctg tagtaatttg cagtactttq ctqtqaccaa
                                                                     1320
caacaatatt gagatgctac cagatgggct gtttcagtgc aaaaaqctqc aqtqtttact
tttggggaaa aatagettga tgaatttgte ceetcatgtq qqtqaqetqt caaacettae
                                                                     1440
tcatcgggag cccattgggt aattacctgg aaacacttcc tcctgaacta gaaggatgtc
                                                                     1500
agtocotaaa acggaactgt ctgattgttg aggagaactt gotcaatact cttcotctco
                                                                     1560
ctgtaacaga acgtttacag acgtgcttag acaaatgttg acttaaagaa aagagacccq
                                                                     1620
tgtttcaaaa tcatttttaa aagtatgctc ggccgggcgt ggtggctcat gcctataatc
                                                                     1680
ccagcacttt gggaggccaa gatgggcgga ttgcttgagg tcaggagttc gagaccagtc
                                                                     1740
tggccaacct ggtgaaaccc catctctgct aaaactacaa aaaaattagc caggcgtggt
                                                                     1800
ggcgtgcgcc tgtaatccca gctacttggg aggctgacgc aggggaattg cttgaaccag
                                                                     1860
ggaggtggag gttgcagtga gccgagattg tgccactgta caccagcctg ggtgacagag
                                                                     1920
caagactctt atctcaaaaa aaa
                                                                     1943
```

<210> 6047 <211> 1917

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1918)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (97)...(846)
<223> similar to gi4929707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6047 aaatcgactc gctcggtgtt cgcccgccga cgccgcacgg cttgctgggg ctgggctctt 60 cctcgcggaa gtggggagga ggcggttgcg gttagtggac cqgqaccqqt aqqqqtqctq 120 ttgccatcat ggctgacccc gacccccggt accctcgctc ctcgatcgag gacgacttca 180 actatggcag cagcgtggcc tccgccaccg tgcacatccq aatqqccttt ctqaqaaaaq 240 tctacagcat tctttctctg caggttctct taactacagt gacttcaaca gtttttttat 300 actitigagic tgtacggaca titigtacatg agagteetge ettaatititg etgtitigeee 360 teggatetet gggtttgatt tttgegttga ttttaaacag acataagtat cecettaace 420 tgtacctact ttttggattt acgctgttgg aagctctgac tgtggcaqtt qttqttactt 480 totatgatgt atatattatt otgoaagott toatactgac tactacagta ttttttgqtt 540 tgactgtgta tactctacaa tctaagaagg atttcagcaa atttggagca gggctgtttg 600 ctcttttgtg gatattgtgc ctgtcaggat tcttgaagtt ttttttttat agtgagataa 660 tggagttggt cttagccgct gcaggagccc ttcttttctg tggattcatc atctatgaca 720 cacactcact gatgcataaa ctgtcacctg aagagtacgt attagctgcc atcagcctct 780 acttggatat catcaatcta ttcctgcacc tgttacggtt tctggaagca gttaataaaa 840 agtaattaaa agtatctcag ctcaactgaa gaacaacaaa aaaaatttaa cqaqaaaaaa 900 ggattaaagt aattggaagc agtatataga aactgtttca ttaagtaata aagtttgaaa 960 caatgattaa atactgttac aatctttatt tgtatcatat gtaattttga gagctttaaa 1020 atcttactat tctttatgat acctcatttc taaatccttg atttaggatc tcagttaaga 1080 gctatcaaaa ttctattaaa aatgcttttc tggctgggca cagtggctca cgcctgtaat 1140 cccaccactt tgggagaccg aggcaggtgg atcacgaggt caagagaaag ttaccatcct 1200 ggctaatacg gngaaacccc atctctacta aaaatacaag aagattagct ggctgtggtg 1260 gcatgcacct gtggtcccgg ctactcggga ggctgaggca ggagaatcgc ttgaacccgg 1320 gaggtggagg ttgcattgag ccaagatcac gccactgcat tccagcctgg tgacagagcg 1380 agactcagtc tcaaaaaaaa tttaacgaga aaaaaggatt aaagtaattg gaagcagtat 1440 atagaaactg tttcattaag taataaagtt tgaaacaatg attaaatact gttacaatct 1500 ttatttgtat catatgtaat tttgagagct ttaaaatctt actattcttt atgatacctc 1560 atttctaaat ccttgattta ggatctcagt taagagctat caaaattcta ttaaaaatgc 1620 ttttctggct gggcacagtg gctcacgcct gtaatcccac cactttggga gaccgaggca 1680 ggtggatcac gaggtcaaga ggttgagacc atcctggcca acatggtgaa accccgtctc 1740 tactaaaaat acaaaaatta gctggatgtg gtggcacaca cctgtagtcc cagctagtca 1800 agaggctgag gccagagaat cgcttgaacc tgggaggtgg aggttgcatt gagccaagat 1860 cacgccactg cattccagcc tggtgacaga gcgagactca qtctcaaaaa aaaaaaa 1917

<210> 6048 <211> 1980

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (461)...(1866)

<223> similar to gi5738138 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6048 attttaaata cacacacca gggggctctg cccctqtaa aaqaaaaaaa atcaaaacaa 60 acaaataaat aaccccaaag agatggaccc aggggagaac gcgtaagtgt gaggggcatg 120 agtatacacg agtgtgcgtg tetttecete tecettattt gtetecgtat qagtetetee 180 ttgtaccetc cccctgcctc gatgatatta ctcccccaga cttqqaaqcc qctqccaqaq 240 tgacgetttg atggtatetg caagegtttt tgetgatett atetetgece eetgaatatt 300 aattccctaa tctggtagca atccatctcc ccagtgaagg acctactaga ggcaggtggg 360 gggagccacc atcagatcat aagcataaga ataatacaaa ggggagggat tcttctqcaa 420 ccaagaggca agaggcgaga gaaggaaaaa aaaaaaagcg atgagttcgc caaatatatg 480 gagcacagga agctcagtct actcgactcc tgtattttca cagaaaatqa cqqtqtqqat 540 tctgctcctg ctgtcgctct accctggctt cactagccag aaatctgatg atgactatga 600 agattatgct tctaacaaaa catgggtctt gactccaaaa gttcctgagg gtgatgtcac 660 tgtcatctta aacaacctgc tggaaggata tgacaataaa cttcggcctg atataggagt 720 gaagccaacg ttaattcaca cagacatgta tgtgaatagc attggtccag tgaatqctat 780 caatatggaa tacactattg atatattttt tgcgcaaacg tggtatgaca gacqtttqaa 840 atttaacagc accattaaag tcctccgatt gaacagcaac atggtgggga aaatctggat 900 tccagacact ttcttcagaa attccaaaaa agctgatgca cactggatca ccaccccaa 960 caggatgctg agaatttgga atgatggtcg agtgctctac tccctaaqqt tqacaattqa 1020 tgctgagtgc caattacaat tgcacaattt tccaatggat gaacactcct gccccttgga 1080 gttetecagt tatggetate caegtgaaga aattgtttat caatggaage gaagttetgt 1140 tgaagtgggc gacacaagat cctggaggct ttatcaattc tcatttgttg gtctaagaaa 1200 taccaccgaa gtagtgaaga caacttccgg agattatgtg gtcatgtctg tctactttga 1260 tetgageaga agaatgggat aetttaceat ecagacetat ateceetgea eaeteattgt 1320 cgtcctatcc tgggtgtctt tctggatcaa taaggatgct gttccaqcca qaacatcttt 1380 aggtatcacc actgtcctga caatgaccac cctcagcacc attgcccqqa aatcqctccc 1440 caaggtetee tatgteacag egatggatet etttgtatet gtttgtttea tetttgtett 1500 ctctgctctg gtggagtatg ggcaccttgc attattttgt cagcaaccgg aaaccaagca 1560 aggacaaaga taaaaagaag aaaaaccctq cccctaccat tqatatccqc ccaaqatcag 1620 caaccattca aatgaataat gctacacacc ttcaagagag agatgaagag tacggctatg 1680 agtgtctgga cggcaaggac tgtgccagtt ttttctgctg ttttgaagat tgtcgaacag 1740 gagettggag acatgggagg atacatatee geattgeeaa aatggaetee tatgetegga 1800 tettettece caetgeette tgeetgttta atetggteta ttgggtetee taeetetaee 1860 tgtgaggagg tatgggtttt actgatatgg ttcttattca ctgagtctca tggagagatg 1920 tctgttctaa gtccacttaa ataatcctct atgtggttga taagtatctg aatctgtttc 1980

```
<210> 6049
<211> 1404
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (90)...(1396)
<223> similar to gi5901572 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6049 gtttcagagg gagtacacgt aaggggcaaa agcagcaacg gaatacgaca acqqaataaq 60 catgaatacg acctggctac ctgaaggagg tacaaqaaaa ttccccaqqa cacaqaqctq 120 gtttggagcc tttctttgat tttattgttt ctattaatgg ttcaagatta aataaagaca 180 atgacactet taaggatetg etgaaagcaa acqttgaaaa geetgtaaag atgettatet 240 atagcagcaa aacattggaa ctgcgagaga cctcagtcac accaagtaac ctgtggggcg 300 gecagggett attgggagtg agcattegtt tetgeagett tgatggggea aatgaaaatg 360 tttggcatgt gctggaggtg gaatcaaatt ctcctgcaqc actgqcaqqt cttaqaccac 420 acagtgatta tataattgga gcagatacag tcatgaatga gtctgaagat ctattcagcc 480 ttatcgaaac acatgaagca aaaccattga aactgtatgt gtacaacaca gacactgata 540 actgtcgaga agtgattatt acaccaaatt ctgcatgggg tggagaaggc agcctaggat 600 gtggcattgg atatggttat ttgcatcgaa tacctacacg cccatttgag gaaggaaaga 660 aaatttetet teeaggacaa atggetggta cacetattae acetettaaa gatgggttta 720 cagaggtcca gctgtcctca gttaatcccc cgtctttgtc accaccagga actacaggaa 780 ttgaacagag tctgactgga ctttctatta gctcaactcc caccagctgt cagtagtgtt 840 ctcagtacag gtgtaccaac agtaccagtt attgccacca caagtaaacc agtccctcac 900 ttctgtgcca ccaatggaat ccagctactt acatttaccg ggtctgatgc cttttaccaq 960 gcagggactg cccaaccttc cccaaccttc aaccttcaac cttcccaggc accacacatt 1020 catggccggg ggttgggctt taccaggaat ttgttaaacc cggggttttg ccacctcttt 1080 cttccatgcc tccccgaaac ttacctgggc attgcacctc tccccctqcc atccqaqttc 1140 ctcccgtcat tccccttggt tccagagagc tcttctgcag caagctcagg agagctgctg 1200 tettecetee egeceaceag caaegeacee tetgaceetg ecacaactae tgcaaaggea 1260 gacgctgcct cctcactcac tgtggatgtg acgccccca ctgccaaggc ccccaccacc 1320 gttgaggaca gagtcggcga ctccacccca gtcagcgaga agcctgtttc tgcqqctqtq 1380 gatgccaatg cttctgagtc acct 1404

```
<210> 6050
<211> 3864
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (391)...(2682)
<223> similar to gi3493660 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6050

cagagaacgt ttgtctgcct gatgagagcc acttgggtta agaaactacc tgtgaatagt 60

catcatttct gtccttcatt ggggaatact tttagaggcc agtttccaaa aattctgctt 120
aaaaaaagaat tctggttttg tcttactctt ccagatgaga tatcacagag gcttgggcct 180
agattgtcat cagcatactg ctatactatt cgtttgttct tattaagcct tattgtgtgt 240
```

```
aatgctgtta ctttttcaga gtgttgcgga gataggaaca tgggagagaa acaatctggg
                                                                      300
taacatgaaa gtgatgctgg ttgctaaggg aaggcaactt gattctgtgg gaagggctgt
                                                                      360
agetgateca teegttgtet agatttgagt atgageaeag tggaagagga ttetgaeaea
                                                                      420
gtaacagtag aaactgtgaa ctctgtgact ttgactcagg acacagaagg gaatctcatt
                                                                      480
cttcactgcc ctcagaatga agcggatgaa atagactcag aagatagtat tgaacctcca
                                                                      540
cataaaaggc tttgtttgtc ctctgaggat gatcagagta ttgatgattc tactccttgc
                                                                      600
atatcagttg ttgcacttcc actttcagaa aatgatcaga gctttgaagt gaccatgact
                                                                      660
gcgaccacag aagtagcaga tgatgaggtt actgagggga ctgtgacaca gatacagatt
                                                                      720
ttgcagaatg agcaactaga tgaaatatct cccttgggta acgaggaagt ttcagcagtt
                                                                      780
agccaagcat ggtttacaac taaagaagat aaggattctc tgactaataa aggacataaa
                                                                      840
tggaagcagg ggatgtggtc caaggaagaa attgatattt tgatgaacaa tattgaacgc
                                                                      900
tatcttaagg cacgcggaat aaaagatgct acagaaatca tctttgagat gtcaaaagac
                                                                      960
gaaagaaaag atttctacag gactatagca tggggtctga accggccttt gtttgcagtt
                                                                     1020
tatagaagag tgcttcgcat gtatgatgac agaaaccatg tgggaaaata tacacctgaa
                                                                     1080
gaaattgaga agctcaagga gctccggata aagcatggca atgactgggc aacaataggg
                                                                     1140
geggegetag gaagaagtge atettetgte aaagateggt geegaetgat gaaggataet
                                                                     1200
tgcaacacag ggaagtggac agaagaagaa gaaaagagac ttgcagaagt ggttcatgag
                                                                     1260
ttgacaagca ctgagcccag gtgacatagt cacacagggt gtgtcttggg cagctgtggc
                                                                     1320
tgaacgagtc ggtacccgct cagaaaagca atgtcgttct aaatggctca actacctgaa
                                                                     1380
ttggaaacag agtgggggta ctgaatggac caaggaagat gaaatcaatc tcatcctcag
                                                                     1440
gatagcagaa cttgatgtag ctgatgaaaa tgacattaac tgggatctgt tagctgaggg
                                                                     1500
atggagtagt gtccgttcac cacaatggct acgaagtaaa tggtggacca tcaaaaggca
                                                                     1560
aattgcaaac cataaggatg tttcgttccc tgtcttaata aaaggtctta aacagttaca
                                                                     1620
tgagaaccaa aaaaacaacc caacgctttt ggagaataaa tcaggatctg gagttccaaa
                                                                     1680
cagtaatacc aattccagtg tgcagcatgt tcagataaga gttgcccgct tggaagataa
                                                                     1740
tacagecate tettetagee ceatggeage attgeagatt ceagtecaga teacecatgt
                                                                     1800
ttcttcagca gactctcctg ctaccgttga ctcagaaaca ataacactaa acagtggaac
                                                                     1860
actacagaca titgagatic ticccictit ccatciacag cccaciggca ciccaggcac
                                                                     1920
ctacctactt caaacaagct caagccaagg ccttccccta actctgactg ctagtcccac
                                                                     1980
agtaaccctg acagetgetg etcetgette teetgaacag attattgtte atgetttate
                                                                     2040
cccagaacat ttgttgaaca caagtgataa tgttacaggt gcagtgtcac acaccaagag
                                                                     2100
tcatcattca gactgttgcc acagaggaca tcacttcttc catatcccaa ggcaggaact
                                                                     2160
gaccgtcgat agtgatattc agttcattct ggattttcct gagcctccag acgccctaga
                                                                     2220
aggcaaacac tttcccagat gaaattcatc accctaagat gactgtggag ccatcattta
                                                                     2280
atgatgetea tgtateeaaa tteagtgaee aaaatageae agaaetgatg aatagtgtta
                                                                     2340
tggtcagaac agaaaaagaa atctctgaca ccgaccttaa acaagaggaa tcaccctctg
                                                                     2400
atttagccag tgcttatgtt actgagggtt tagagtctcc cactatagaa gaacaagttg
                                                                     2460
atcaaacaat tgatgatgaa acaatactta tegtteette accacatgge tttatecagg
                                                                     2520
catctgatgt tatagatact gaatctgtct tgcctttgac aacactaaca gatcccatac
                                                                     2580
tccaacatca tcaggaagaa tcaaatatca ttggatcatc cttgggcagt cctgtttcag
                                                                     2640
aagattcaaa ggatgtcgaa gatttggtaa actgtcatta gaataattct tagaaatagg
                                                                     2700
cagttcaagc aaagaaggca cactgttaat tacaacctct tcaaagaaat aggagcaacc
                                                                     2760
cccaagaggc ttaatttacc aatttaaata gccacagtcc ttaagccaca cacattgttg
                                                                     2820
ctgctatgac tttttacctc ctttaaacac atcatctgag gttgagtttt atgacagtat
                                                                     2880
gtagttgagt ggaggctggg agttttaagc ataaatccct gtttagtgtt acatgggaat
                                                                     2940
aaggaatttc attcacttca gccactaaga aaagtttaga atcacgaaag cttaactgct
                                                                     3000
gtggtttaaa gtacagtttc tctaaagatc agacatggca ctgtctcctc tcaagcctgg
                                                                     3060
ttgtagttca gatgagtctt ttcaacatgg tcttcaacat ggtctagagc ttaccagtga
                                                                     3120
tcttctgatc ttcaagaaga ctaagtttga gacttgacca gcatacaagt atagagacct
                                                                     3180
aggaggtggt cttgtggtgg tacatttggt taacccattg ctggcagtgg gagctgattt
                                                                     3240
aggcagggta aacaggaaag cattaaaagt taaaattcac tacaggtttt ttgttacttt
                                                                     3300
taaagggaat atggataagc atagtaacaa aacccaccag aatctaagca gttttcaccc
                                                                     3360
cctcagaaac cactgtcatt agtttacaaa gttagcactt tgaagtaaaa ctaaatgagg
                                                                     3420
aaggaagtaa tgttacctat ccttgatacc atgaccattt attagatgtt ttgctatata
                                                                     3480
aattaccgag agaatagttt gtcatccact tagtgtgtta gctggtgggg tacaatataa
                                                                     3540
cctctcatct caggctattt taaaaaaaca atatttgctt ctataacaaa aggaaacaaa
                                                                     3600
tctaagaatc attcctgtac tacagaaggg ttaaggcaaa ggtagccttt tgggcttttt
                                                                     3660
```

```
aatgaatatg acccctatag aaaagtcaag aaaaaaaaac ccttgtataa attatttat 3720 ttattattgt aattagatct tcacaaagtt gtcttttcac tgtgttttgt caacgtgaaa 3780 ttaaaattgta gttataagca aaagttggtt gcctagggaa caattgtata ttcagtttaa 3840 cagaaataaa agaatatttg tctt 3864
```

```
<210> 6051
<211> 2165
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (508)...(718)
<223> similar to gi1938351 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6051 acggggctgt acgagctggt gtggcgggtg ctgcacgcgc tgctctgtct gcaccgcacg 60 etcacetect ggeteegegt teggetegge acetggaact ggatetggeg gegetgetge 120 egegeegete tgeegeggte etagegeege teggetteae geteegeaag eeeeeggeag 180 teggeaggaa eegeegteae caeeggeaee egegeggggg gtaegtgeet ggeageegea 240 caccacegga tgcgctggcg cgcggacggt cgttccttgg agaagctgcc tgtgcatatg 300 ggcctggtga tcaccgaggt ggagcaggaa cccagcttct cggacatcgc gagcctcgtg 360 gtgtggtgta tggccgtggg catctcctac attagcgtct acgaccacca aggtattttc 420 aaaagaaata attccagatt gatggatgaa attttaaaac aacagcaaga acttctgggc 480 ctagattgtt caaaatactc accagaattt gcaaatagta atgacaaaga tgatcaagtt 540 ttaaattgcc atttggcagt gaaggtgctg tctccggaag atggaaaagc agatattgta 600 agagetgete aggaettttg ceagttagta geeeagaage aaaagagaee cacagatttg 660 gatgtagata cgttagccag tttacttagt tcaaatggtt gtcctgatcc tgatttagta 720 ttgaagttcg gtcctgtgga cagcacatta ggctttcttc cctggcacat cagattgact 780 gagattgtct ctttgccttc ccacctaaac atcagttatg aggacttttt ctctgccctt 840 cgtcaatatg cagcctgtga acagcgtctg ggaaagtagt ggtcattggt tgcataattt 900 gatctgaggc ttatggagga aaggacccaa gtgactctga tgtttacaaa gcacctatga 960 aaccctgtac acacctatga aaccctgtac acacctagtt cataatcctc ataatttatc 1020 aacaaacaca aagaagtgtc ttacttgaaa gtgagtgtgt gtgtgtgcgt gtgtgcgtgc 1080 acacatgtgc acgtttgtat gtgtggaaat aaacataaat ggggacgtgt tggagaagga 1140 aatacataga cctacaactt tgagcatata gcagtgatgt tttaggaact gaaatgtcac 1200 acttaataaa gtcttcagcc cagctacttc cctatttttg tggggagaag agggcctgat 1260 tagaactgtt ctggttgtgt ttggcgggag gggaataatt tttgttcagt ccttcttagt 1320 gaccaaactt taatttttaa gaataatata ttgacttact gaactgaagc attctgagtt 1380 gaaaggagct ccagaggagt ggagttctgt gttgctcaca tgttaaaatc ttgctcacct 1440 tcagagcaga gggaatacct atcttcagat atccgtccat tttcatctct taattgtagt 1500 caaaagtatg acttgagagt gttgctctgg tattctgggt tctgaagtct ggtattctgg 1560 tattctgggt tcaaaagtat gacttgagag tgttgctctg gtattctgag agttgctctg 1620 tattctgggt tctgaagatt atttgaaaaa taactcctac tacattgaaa tgcagactta 1680 aaaatttaaa cattggatta ggcagtcaaa aaaaccaagc aagcataaaa ggtcaataag 1740 ttgtaatctt gatagtaaag gtggaaaact tattataaat ggaaagaaag ttttatttcc 1800 ttttttgttt gatgggcagt atgccatatt atacccaaag ttcttttaaa aaatatttcc 1860 atcaaccatt tttatttaaa ataaacattt gagggaagtt accaaggcag cttttttcct 1920 caaaagtaac ctgttcctct ttggaatagc acattttagg ggcatggtta atacctgaga 1980

```
tttttactca gtaaatcctg atggttactg tgtgtaaaat atctttaagt aggattgaag 2040 gcctctgtgg gggaataaaa tattaccaaa gtctataaaa ataaatttta catgttctct 2100 tttatgacag agagcagcac tggttctgtt atttttaaaa tgaataattg atttcttgat 2160 aggtg
```

```
<210> 6052
<211> 6685
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (297)...(3455)
<223> similar to gi3413868 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6052 gacageetgg geataceata tateteetge caactgtggt aatetgeaac ttgetaceet 60 120 gtgaacttga tttttatgtt aaaggaatgc caattaatgg gacgctgaaa cctggcaagg aggcagetet ceatacaget gatacatece agaacattga getgggggta teaetggaga 180 atttccccct ctgtaaagaa ttgctcattc cacctggaac ccaaaactat atggtgagaa 240 300 tgegacteta tgacgteaac egteggeage tgaaceteac cateeggatt gtgtgtegag cagaaggatc cttaaagatc ttcatttctg ctccatattg gctgattaac aaaacagggt 360 tgccactgat cttcagacag gacaatgcca agacagatgc tgcaggccag tttgaggagc 420 atgagetgge cegtageetg agteetetet tattetgeta tgetgacaaa gageageeaa 480 540 acctctgcac gatgagaatc ggaaggggga ttcatccaga aggcatgccg ggctggtgtc agggettete cetggatggt ggtagtggtg teegagettt gaaagteate cageaaggaa 600 660 accgcccagg gctgatctat aacattggta ttgatgtcaa gaaaggccga ggtcgataca ttgatacctg catggtcatc tttgcccccc gttacctgtt agataataaa tcatctcaca 720 agettgeatt tgeacagagg gaatttgeca ggggacaggg aacagecaat ceegaaggtt 780 acatttccac ccttcctggt tccagtgtgg tgttccactg gcctcggaat gactatgatc 840 agctattgtg tgtcagactg atggacgttc ccaattgtat ttggtctgga ggctttgaag 900 tcaacaagaa taatteette catateaaca tgagggatae ettgggaaaa tgettettee 960 tacgagtgga aattactctc cgaggagcta cgtataggat ctcatttagt gacacagatc 1020 agttacetee teettteega attgacaact tttetaaggt eeeggttgte tttactcage 1080 atggcgtagc tgaacccagg ctccggactg aagtgaagcc catgacttca ttggattatg 1140 cctgggacga acccaccttg ccacctttta tcactctgac tgttaaaggg gcagggtcct 1200 ctgagatcaa ctgcaacatg aatgatttcc aggataatcg gcagctttat tatgaaaatt 1260 tcatttacat tgctgctaca tatacattct ctggcttgca ggagggaaca ggcaggcctg 1320 tggcttccaa caaggccatt acctgtgcgg agctcgtttt ggatgtctca cccaagacac 1380 aaagagtcat tttaaaaaag aaggaaccag gaaagcgttc tcagctgtgg aggatgacag 1440 gaacaggaat getggeecat gagggeteet cagtteetea caateecaat aageeeteag 1500 ccgcccgctc caccgagggg tctgccatct tagatattgc tggtctcgct gcagtgactg 1560 acaacagata cgagccactg atgctgagaa agcctgaccg caggcgaagc acaactcaga 1620 cgtggagttt ccgagaagga aaactgacct gtgggttaca tgggttggtc gtccaggcca 1680 aaggaggact ttctggtttg tttgatggag ctgaagttgt tcttggtcct gacacttcca 1740 tggagctttt ggggccagtt ccacctgaac aacaatttat taatcaaaaa atgagacctg 1800 gttctggaat gttatccatc agagtcatcc cagatggacc aactagagca ctccagataa 1860 cagatttctg ccaccggaaa agcagccgtt catatgaagt ggatgaactt cctgtcaccg 1920

1980

aacaagagct gcagaaatta aagaatccag atacagagca ggaattggaa gtgcttgtga

```
2040
ggttagaagg tggaattggg ttgtccttaa ttaataaagt cccagaagaa ctggtctttg
                                                                    2100
caagtettac aggaatcaat gtgcactata cacagetgge aaccagtcac atgettgaac
                                                                    2160
tcagcataca ggatgtacag gtggacaatc agctcattgg taccacgcag cccttcatgc
                                                                    2220
tctatgtgac tcccctgagc aatgagaatg aggtcatcga gaccggccca gctgtgcaag
                                                                    2280
tcaacgcaqt gaagttcccc agtaagagtg cactgaccaa catctacaag catctgatga
                                                                    2340
tcacagetca gagattcaca gtgcaaattg aggagaaact geteetcaag etgetaagtt
tctttggcta cgatcaagca gaatcagagg tggaaaaata tgatgaaaac ctccatgaaa
                                                                    2400
agacagetga geaaggtgga acaceaatte gatactaett tgaaaatete aaaateagea
                                                                    2460
tteeteagat caagetaagt gtgtteacet ceaacaaget cecattggat ettaaggeee
                                                                    2520
taaaaagcac cttggggttt cctttgatac ggtttgaaga cgctgtgatt aatctagatc
                                                                    2580
                                                                    2640
cattcactcg ggtacatccc tatgagacca aggagttcat catcaatgat atcctcaaac
                                                                    2700
atttccagga ggaactcctc agccaggcag ctcgaatcct gggatcagtg gattttcttg
                                                                    2760
gcaatcctat ggggcttttg aatgatgttt ctgaaggggt tactggactg ataaaatatg
gaaatgtcgg gggcctcatc agaaatgtta cacacggagt atcaaactct gctgccaagt
                                                                    2820
ttgctggaac attatcagat ggcttaggga agacgatgga caatcggcat cagtcagagc
                                                                    2880
gggagtacat caggtaccat gcagccacaa gtggtgaaca ccttgtagcc ggcatccatg
                                                                    2940
                                                                    3000
gcctggctca tggtatcatt ggtggactga ccagtgttat aacttcgaca gtggaaggtg
tgaaaacaga agggggtgtc agcggtttca tatctggcct tggaaaaggg cttgttggca
                                                                    3060
ctgtaaccaa gccagtggca ggcgccctgg attttgcatc agaaacagcc caggcggtga
                                                                    3120
gagacacage cacacteage ggccccagga etcaagcaca gagggttegg aaaccgcgtt
                                                                    3180
gctgcacggg gccccagggg ctgcttcccc gatattctga gagccaggcg gaaggacagg
                                                                    3240
agcagetett caaacteaca gacaacatac aggacgaatt etteateget gtggagaaca
                                                                    3300
ttgacagcta ctgcgtgctc atctcctcca aagctgttta cttcctgaaa agtggagact
                                                                    3360
acgtggatcg agaagccatt ttcctagaag tcaaatacga tgacctctac cactgccttg
                                                                    3420
tetecaaaga eeatgggaag gtgtatgtge aggtgaceaa gaaageegtg ageaegagea
                                                                    3480
gtggagtgtc catccccggc ccctcccacc agaagcccat ggtccatgtg aaatctgagg
                                                                    3540
tccttgctgt caagttgtca caagaaataa actacgcaaa gagcctctac tatgaacagc
                                                                    3600
agettatgtt aagactcage gaaaacegag ageagetgga getggactee tgaageeeeg
                                                                    3660
ctgctgagat gggcgctccc gacacagcgc agacccacca ggaggaaaga ggcccagctc
                                                                    3720
                                                                    3780
tcagctgacg atggaggcag aaccggagtc gggtttgggg aagttgtcaa ggaatgaggg
aaagtaaatc ctcatgagga aaagtacaaa tggaaatcgt attaatttgt gaggcaggga
                                                                    3840
gttattttag attatgggaa ataattttta aaggtattgg ttaaataacg tttaaaaaca
                                                                    3900
tgtactgaga tgaatctaat ttttagattg ccctgtattt tgttaacatg tatatatgta
                                                                    3960
caacagtgtg tttgtaaata tataggaacg tttctgaaca gggtctgtgc tatgtgtaaa
                                                                    4020
ggtttgttaa ctgtaaagta atataaagtt atattggatc ttctattgca ctaattctag
                                                                    4080
atgtctaatt caggatactg tctatagaaa ggcattctta aaagttaaag aatgttacgt
                                                                    4140
cttagttttg gagactaaag tattcccagt aaagtgggtt gaggtgaggg ctgtggtcct
                                                                    4200
gaaagggacg cctttgacat cgtggctgtc cagttgggct gtgagctgtg gcacccagga
                                                                    4260
ctggcgctgg cccttcagaa ggatctagga gagggcttg ggagcccact tttaatttct
                                                                    4320
cacccccatt ttacaaagag tgcttagatt cttacaaatt atgatgtaag ttatccattt
                                                                    4380
ggctttttcc taactagtct taccaaactt agggggaaac ctgtgctcca ttaccacatg
                                                                    4440
ggtgcaagtc agcattgtaa gttttctcag gttattatta ttagagaggt tggaaacatt
                                                                    4500
ggtaaactct gttgattgag aaggaaaaaa aaaagtcccc attgaactgt tgcaacaaat
                                                                    4560
cagaaatcca cataaaagtg ctctcctgcc tgggcagcaa caaccaagaa caaagccccg
                                                                    4620
ggactgtttt ctttttaata aagccacagg caggcatcgt agctccacag cccgagggga
                                                                    4680
cacaggatgg aaaccccagg atgagaaggg agcagggaga gttccagaaa gggggatgaa
                                                                    4740
ataggagtat taaaaagctg cgttggtaag tttttcatgg aaccaagatt tgacaaaggc
                                                                    4800
atctettate ettggtttta aatteetget gggageaagg eetggtatga gegeeetggg
                                                                    4860
tettgttttt ggtgtttege ttttetgtaa ggattaagea gatagggaga agggaaaagg
                                                                    4920
ggcctcactt tagaatgaat gagtcacctt gtgattttta aatttttatt ttaataaagc
                                                                    4980
taatcaattt ctacaacctt gtcacatgta gctgagtctg ggatgactca gtggatcagt
                                                                    5040
ggatgcgtgg aaggttttgg tgtttataac tcatgaccca aatccttcca agacacaaat
                                                                    5100
gaagctaate ttetteeeet eeettteete teecaettee eetetgtgte tgtgtetgtg
                                                                    5160
5220
gagetttage acaagtaget acatagtgtt caaggateag etttettgaa etcegagget
                                                                    5280
tggttgcctt tgctgaactc caagttagtg gattgcagaa tggaaacttg gcttttgcgg
                                                                    5340
cactgggtga gttttagttt gtgtgtgtct tgctgggggg tggtgatgat tgtctcagca
                                                                    5400
```

```
ctcacgcact gcacaagatg gcagcaggat acagcactgc acaagatggc agctcctctg
                                                                     5460
cagetteete eteageetee eteettgeae ecceacaggt ttggettgtg gtttttgtea
                                                                     5520
                                                                     5580
tcagtaacct actgcctgag atcatgatct cttaaaagat gagactctcg gaagggttga
ttgtatgegt cagtgageet tetateacet tetggaacaa agteaettga aatetettga
                                                                     5640
                                                                     5700
tgagattaag gagtttagtg ttactaagaa aatctgcttt gggccgcagc agtgctgggt
gttctcagac ctgactgagg aagttagctg cgggctgcc tgtgggctgg tgcttcagga
                                                                     5760
ggaatccaga gaagtgttca gatgcccccc ttgggctcct ttctaatttt aatcagctct
                                                                     5820
                                                                     5880
ttaaataget geceatetee tgtgattgea eaaceaagea etttgaeatt tgeaeettag
                                                                     5940
gagaggcaga tgttaaaatg gaatccaaag accacctagg gcggggctgg gtgggagatg
ggagggccaa ctgcgagctg ctccacttct cagetctccc ctgccctgca gccctgggcc
                                                                     6000
agacaaggcc agaaggtttc aggggcattt gacatcccct cctggttctc accaggaaaa
                                                                     6060
catccaaagc tttggaggaa acaggccctg ccctggctc cttaaatgcc ccgtctcttt
                                                                     6120
gtaaactgat attcagccag caatgcctaa gactttgtta agatcatttc tactgctttt
                                                                     6180
ctttctgctt caaacacaca gttcgtctct gaggaaagta aaataaatgg aataagagta
                                                                     6240
aattgggtaa ggagatatcc aaagctaccc agtcccttga cccagcacag ttggccgacc
                                                                     6300
egtgteacte cetggetgte getgettete tgtgeteact gaagggtgag eeaggeeagt
                                                                     6360
getteeccag eccetgggee tggteactae acagtggaaa acagacaage ggeecettee
                                                                     6420
ccaaatccca agagtgtctt gctgcttggt gggtgctcat cgcaatgttc tgaaggctcc
                                                                     6480
agggccactt tgtttgtaag tatgatctgg gcctcaaaat accatagtag ctgcttgata
                                                                     6540
aaattotaaa aatatotggt tototattat gtaaacacta ttacagtoac cagtgtgtga
                                                                     6600
agactettga gtetggttet catateagag teateatttt tetteetgtg gaataaaatg
                                                                     6660
ccttgtggac ttcccaaaaa aaaaa
                                                                     6685
```

```
<210> 6053
<211> 7028
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(6148)
<223> similar to gi30186 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6053
cgtggtttgt agatgtgctt ggggagaatg ggggcctctt ctccaagaag cccggagcct
                                                                  60
gtegggeege eggegeeegg teteceette tgetgeggag gatecetget ggeggttgtg
                                                                 120
180
tgccaggcct accaacctaa ctgatgagtt tgagtttccc attgggacat atctgaacta
                                                                 240
tgaatgccgc cctggttatt ccggaagacc gttttctatc atctgcctaa aaaactcagt
                                                                 300
ctggactggt gctaaggaca ggtgcagacg taaatcatgt cgtaatcctc cagatcctgt
                                                                 360
gaatggcatg gtgcatgtga tcaaaggcat ccagttcgga tcccaaatta aatattcttg
                                                                 420
tactaaagga taccgactca ttggttcctc gtctgccaca tgcatcatct caggtgatac
                                                                 480
tgtcatttgg gataatgaaa cacctatttg tgacagaatt ccttgtgggc tacccccac
                                                                 540
catcaccaat ggagatttca ttagcaccaa cagagagaat tttcactatg gatcagtggt
                                                                 600
gacctaccgc tgcaatcctg gaagcggagg gagaaaggtg tttgagcttg tgggtgagcc
                                                                 660
ctccatatac tgcaccagca atgacgatca agtgggcatc tggagcggcc ccgccctca
                                                                 720
gtgcattata cctaacaaat gcacgcctcc aaatgtggaa aatggaatat tggtatctga
                                                                 780
caacagaagc ttattttcct taaatgaagt tgtggagttt aggtgtcagc ctggctttgt
                                                                 840
catgaaagga ccccgccgtg tgaagtgcca ggccctgaac aaatgggagc cggagctacc
                                                                 900
```

```
aagctgctcc agggtatgtc agccacctcc agatgtcctg catgctgagc gtacccaaag
                                                                      960
ggacaaggac aacttttcac ctgggcagga agtgttctac agctgtgagc ccggctacga
                                                                     1020
                                                                     1080
cctcagaggg gctgcgtcta tgcgctgcac accccaggga gactggagcc ctgcagcccc
                                                                     1140
cacatgtgaa gtgaaatcct gtgatgactt catgggccaa cttcttaatg gccgtgtgct
                                                                     1200
atttccagta aatctccagc ttggagcaaa agtggatttt gtttgtgatg aaggatttca
                                                                     1260
attaaaaggc agctctgcta gttactgtgt cttggctgga atggaaagcc tttggaatag
                                                                     1320
cagtgttcca gtgtgtgaac aaatcttttg tccaagtcct ccagttattc ctaatgggag
                                                                     1380
acacacagga aaacctctgg aagtctttcc ctttggaaaa gcagtaaatt acacatgcga
                                                                     1440
cccccaccca gacagaggga cgagcttcga cctcattgga gagagcacca tccgctgcac
                                                                     1500
aagtgaccct caagggaatg gggtttggag cagccctgcc cctcgctgtg gaattctggg
tcactgtcaa gccccagatc attitctgtt tgccaagttg aaaacccaaa ccaatgcatc
                                                                     1560
                                                                     1620
tgactttccc attgggacat ctttaaagta cgaatgccgt cctgagtact acgggaggcc
                                                                     1680
attetetate acatgictag ataacetggt etggicaagt eccaaagatg teigtaaaeg
                                                                     1740
taaatcatgt aaaactcctc cagatccagt gaatggcatg gtgcatgtga tcacagacat
ccaggttgga tccagaatca actattcttg tactacaggg caccgactca ttggtcactc
                                                                     1800
                                                                     1860
atctgctgaa tgtatcctct cgggcaatgc tgcccattgg agcacgaagc cgccaatttg
                                                                     1920
tcaacgaatt ccttgtgggc tacccccac catcgccaat ggagatttca ttagcaccaa
                                                                     1980
cagagagaat tttcactatg gatcagtggt gacctaccgc tgcaatcccg gaagcggagg
gagaaaggtg tttgagcttg tgggtgagcc ctccatatac tgcaccagca atgacgatca
                                                                     2040
agtgggcate tggageggee eggeeeetea gtgeattata eetaacaaat geaegeetee
                                                                     2100
aaatgtggaa aatggaatat tggtatctga caacagaagc ttattttcct taaatgaagt
                                                                     2160
tgtggagttt aggtgtcagc ctggctttgt catgaaagga ccccgccgtg tgaagtgcca
                                                                     2220
ggccctgaac aaatgggagc cggagctacc aagctgctcc agggtatgtc agccacctcc
                                                                     2280
agatgtcctg catgctgagc gtacccaaag ggacaaggac aacttttcac ccgggcagga
                                                                     2340
agtgttctac agctgtgagc ceggctatga cetcagaggg getgegteta tgegetgeac
                                                                     2400
accccaggga gactggagcc ctgcagcccc cacatgtgaa gtgaaatcct gtgatgactt
                                                                     2460
catgggccaa cttcttaatg gccgtgtgct atttccagta aatctccagc ttggagcaaa
                                                                     2520
                                                                     2580
agtggatttt gtttgtgatg aaggatttca attaaaaggc agctctgcta gttattgtgt
                                                                     2640
cttggctgga atggaaagcc tttggaatag cagtgttcca gtgtgtgaac aaatcttttg
                                                                     2700
tecaagteet ecagttatte etaatgggag acacacagga aaacetetgg aagtetttee
                                                                     2760
ctttggaaaa gcagtaaatt acacatgcga cccccaccca gacagaggga cgagcttcga
ceteattgga gagageacea teegetgeae aagtgaeeet caagggaatg gggtttggag
                                                                     2820
cagecetgee eetegetgtg gaattetggg teactgteaa geeceagate attttetgtt
                                                                     2880
tgccaagttg aaaacccaaa ccaatgcatc tgactttccc attgggacat ctttaaagta
                                                                     2940
cgaatgccgt cctgagtact acgggaggcc attctctatc acatgtctag ataacctggt
                                                                     3000
ctggtcaagt cccaaagatg tctgtaaacg taaatcatgt aaaactcctc cagatccagt
                                                                     3060
gaatggcatg gtgcatgtga tcacagacat ccaggttgga tccagaatca actattcttg
                                                                     3120
tactacaggg caccgactca ttggtcactc atctgctgaa tgtatcctct caggcaatac
                                                                     3180
tgcccattgg agcacgaagc cgccaatttg tcaacgaatt ccttgtgggc tacccccaac
                                                                     3240
categocaat ggagatttca ttagcaccaa cagagagaat tttcactatg gatcagtggt
                                                                     3300
gacctaccgc tgcaatcttg gaagcagagg gagaaaggtg tttgagcttg tgggtgagcc
                                                                     3360
ctccatatac tgcaccagca atgacgatca agtgggcatc tggagcggcc ccgccctca
                                                                     3420
                                                                     3480
gtgcattata cctaacaaat gcacgcctcc aaatgtggaa aatggaatat tggtatctga
caacagaagc ttattttcct taaatgaagt tgtggagttt aggtgtcagc ctggctttgt
                                                                     3540
catgaaagga ccccgccgtg tgaagtgcca ggccctgaac aaatgggagc cagagttacc
                                                                     3600
aagetgetee agggtgtgte ageegeetee agaaateetg catggtgage ataccecaag
                                                                     3660
ccatcaggac aacttttcac ctgggcagga agtgttctac agctgtgagc ctggctatga
                                                                     3720
ceteagaggg getgegtete tgeactgeac acceeaggga gactggagee etgaageece
                                                                     3780
gagatgtgca gtgaaateet gtgatgaett ettgggteaa eteeeteatg geegtgtget
                                                                     3840
atttccactt aatctccagc ttggggcaaa ggtgtccttt gtctgtgatg aagggtttcg
                                                                     3900
cttaaagggc agttccgtta gtcattgtgt cttggttgga atgagaagcc tttggaataa
                                                                     3960
cagtgttcct gtgtgtgaac atatcttttg tccaaatcct ccagctatcc ttaatgggag
                                                                     4020
acacacagga actecetetg gagatattee etatggaaaa gaaatatett acacatgtga
                                                                     4080
ccccaccca gacagagga tgaccttcaa cctcattggg gagagcacca tccgctgcac
                                                                     4140
aagtgaccet catgggaatg gggtttggag cagecetgee cetegetgtg aactttetgt
                                                                     4200
tegtgetggt cactgtaaaa ceccagagea gtttecattt gecagteeta egateecaat
                                                                     4260
taatgacttt gagtttccag tcgggacatc tttgaattat gaatgccgtc ctgggtattt
                                                                     4320
```

```
tgggaaaatq ttctctatct cctgcctaga aaacttggtc tggtcaagtg ttgaagacaa
                                                                   4380
                                                                   4440
4500
cacagataca cagtttggat caacagttaa ttattcttgt aatgaagggt ttcgactcat
tggttcccca tctactactt gtctcgtctc aggcaataat gtcacatggg ataagaaggc
                                                                   4560
acctatttgt gagatcatat cttgtgagcc acctccaacc atatccaatg gagacttcta
                                                                   4620
                                                                   4680
cagcaacaat agaacatctt ttcacaatgg aacggtggta acttaccagt gccacactgg
                                                                   4740
accagatgga gaacagctgt ttgagcttgt gggagaacgg tcaatatatt gcaccagcaa
                                                                   4800
agatgatcaa gttggtgttt ggagcagccc tccccctcgg tgtatttcta ctaataaatg
                                                                   4860
cacageteca gaagttgaaa atgeaattag agtaceagga aacaggagtt tetttteeet
cactgagatc atcagattta gatgtcagcc cgggtttgtc atggtagggt cccacactgt
                                                                   4920
gcagtgccag accaatggca gatgggggcc caagctgcca cactgctcca gggtgtgtca
                                                                   4980
gccgcctcca gaaatcctgc atggtgagca taccctaagc catcaggaca acttttcacc
                                                                   5040
tgggcaggaa gtgttctaca gctgtgagcc cagctatgac ctcagagggg ctgcgtctct
                                                                   5100
gcactgcacg ccccagggag actggagccc tgaagcccct agatgtacag tgaaatcctg
                                                                   5160
tgatgacttc ctgggccaac tccctcatgg ccgtgtgcta cttccactta atctccagct
                                                                   5220
tggggcaaag gtgtcctttg tttgcgatga agggttccga ttaaaaggca ggtctgctag
                                                                   5280
tcattgtgtc ttggctggaa tgaaagccct ttggaatagc agtgttccag tgtgtgaaca
                                                                   5340
                                                                   5400
aatcttttgt ccaaatcctc cagctatcct taatgggaga cacacaggaa ctccccttgg
agatattccc tatggaaaag aagtatctta cacatgtgac ccccacccaq acagagggat
                                                                   5460
gaccttcaac ctcattgggg agagcaccat ccgccgcaca agtgaacctc atgggaatgg
                                                                   5520
ggtttggagc agccctgccc ctcgctgtga acttcctgtt ggtgctgcct gcccacatcc
                                                                   5580
acccaagate caaaacggge attacattgg aggacacgta tetetatate tteetgggat
                                                                   5640
gacaatcagc tacacttgtg accccggcta cctgttagtg ggaaagggct tcattttctg
                                                                   5700
tacagaccag ggaatctgga gccaattgga tcattattgc aaagaagtaa attgtagctt
                                                                   5760
cccactgttt atgaatggaa tctcgaagga gttagaaatg aaaaaagtat atcactatgg
                                                                   5820
agattatgtg actttgaagt gtgaagatgg gtatactctg gaaggcagtc cctggagcca
                                                                   5880
gtgccaggcg gatgacagat gggaccctcc tctggccaaa tgtacctctc gtacacatga
                                                                   5940
tgctctcata gttggcactt tatctggtac gatcttcttt attttactca tcattttcct
                                                                   6000
ctcttggata attctaaagc acagaaaagg caataatgca catgaaaacc ctaaagaagt
                                                                   6060
ggctatccat ttacattctc aaggaggcag cagcgttcat ccccgaactc tgcaaacaaa
                                                                   6120
tgaagaaaat agcagggtcc ttccttgaca aagtactata cagctgaaga acatctcgaa
                                                                   6180
tacaattttg gtgggaaagg agccaattga tttcaacaga atcagatctg agcttcataa
                                                                   6240
agtetttgaa gtgaetteae agagaegeag acatgtgeae ttgaagatge tgeeeettee
                                                                   6300
ctggtaccta gcaaagctcc tgcctctttg tgtgcgtcac tgtgaaaccc ccacccttct
                                                                   6360
gcctcgtgct aaacgcacac agtatctagt caggggaaaa gactgcattt aggagataga
                                                                   6420
aaatagtttg gattacttaa aggaataagg tgttgcctgg aatttctggt ttgtaaggtg
                                                                   6480
gtcactgttc ttttttaaaa tatttgtaat atggaatggg ctcagtaaga agagcttgga
                                                                   6540
aaatgcagaa agttatgaaa aataagtcac ttataattat gctacctact gataaccact
                                                                   6600
cctaatattt tgattcattt tctgcctatc ttctttcaca tatgtgtttt tttacatacg
                                                                   6660
tacttttccc ccttagtttg tttcctttta ttttatagag cagaacccta gtcttttaaa
                                                                   6720
cagtttagag tgaaatatat gctatatcag tttttacttt ctctagggag aaaaattaat
                                                                   6780
ttactagaaa ggcatgaaat gatcatggga agagtggtta agactactga agagaaatat
                                                                   6840
ttggaaaata agatttcgat atcttctttt tttttgagat ggagtctggc tctgtctccc
                                                                   6900
aggetggagt geagtggegt aatetegget caetgeaage teegeeteee gggttgaeae
                                                                   6960
cattttcctg cctcagcctc ctgagtagtt ggccttacca gtagatggga ctacaggcac
                                                                   7020
ctgccaac
                                                                   7028
```

```
<210> 6054
```

<211> 236

<212> DNA

<213> Homo sapiens

<221> misc_feature <222> (41)...(115) <223> similar to gi32402 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 6054
atgaaacggg acctagtaat ggatcactgc tcttgggagc cttacagtct actgtagttt 60
agttaactgg gaaataattt tgagctcatt tttattttc tgtaagctca gctgctgaac 120
gcccaaattc ttccctggta catgcatgtt ccatatcgac gttctgctgc tatgcacgct 180
ggtattctgc aatagctggc catgttttc cttgagcctg ggtcgacgcg gtcgct 236

<210> 6055
<211> 3801
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3648)...(1470)
<223> similar to gi4775362 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 6055 ttttttttt ttcaacaagg aaatgtattt atttttcct ttagaatttg gctcagaaca 60 gtaacaaaaa tatttacatt aaaataaatt aacatgcaat tacttaacca tatgtaataa 120 tttacgttgg aatatattag ccttcccatg agtttaataa aaactaatat ttggttttag 180 attcaatacc atcctttcaa atatttggta tgaaacttgg tagcaatgca attgtctgat 240 gtacagagca gatttcacca tgagagatta caccaaagaa cagatgtccc ttcccagaac 300 attatctcac cccagactca gaaactgagc agccaagctt ccttcccagg aatcaccatg 360 gaatgtctga acaataacca ggccctggag attactgcag ggctggcaga gttttaggaa 420 teagecaaac tettttteac actaacceac taggaaggat atagtteaaa tgtaatgttg 480 agtecticag titatitgaa cactgaaaca atatgitgia gaaacettea titteecaaa 540 atagaaatct gaaagatata tgcacatgat ttcttagatc atctaaaagt acccataaaa 600 acctgtcact agggccaggt gtgatggctt acacctgtaa tcccagcacc ttgggaggca 660 gaggcgggcg gatcacctga ggtcaggagt tcaagaccag cctggccaac atggtgaaac 720 cctgtccact aaaaatacaa aaaaaaatca gccgggcgtg gtgcatqtqc ccqcaatccc 780 agccactcaa gaggctgagg caggagaatc accgaacccg gggggcaqag gttgcattqa 840 gccactgcac tccagcctgg ggttcatgcc attctcctgc ctcagcctcc cgagtagctg 900 ggaccegeca ccacacecag ctaatttttt gtatttttag tagagacggg gtttcaccat 960 gtttcaccat gttagccagg gcggtctcga tctcctgacc tcgtgatccg cccqcctcqq 1020 cctcccaaag tgctgggatt acaggcgtga gccactgtgc ccggcctgga aggattatta 1080 atgcaaactt caggatgaag tgatatcccc aggcaaggcc tgaaggtctc agtggtatta 1140 atacattagt aagcagagtt ctaagaaggc ttcctctcta ttattgtagc tgctttggca 1200 cagaaaattg tgactgtaac ttacagggtt tgagctaaaa tgacccctag taagaagaca 1260 ttcagaaaga atagcaatcc taacaaaaat aggagtgggg aaaggtgaac tctggaagag 1320 gagaccaaaa gtgaaaacat ttctctgcca aagtcacctg cagttcaata ccagatttga 1380 ttgttaagaa acggtcatcc taaagacaag aacttgattc cactcaggag ctctggagag 1440

```
1500
aaggtccatg tctgttcctg gaggtctagt agatcctgcg tgttgtgtag tccagaacca
tgctggcagc acccagcagg gcggggtcaa ccaaatccga aaccaccaca tccacgtcct
                                                                     1560
gcacggagga caaggcctgc tggcgaatga cgtctttgac aatgtggata tagtgactgg
                                                                     1620
ccaggactcc ggagaggatc acaagggagg gattcatggt atggaggatg ttcacaaccc
                                                                     1680
caagacccaa agctgttcca gctgttctta ggatgctctq qqccttcqca ttqccaaqtt
                                                                     1740
tegeagettg gatgagatgg agegeaceca cageeteate ttttggeact gacateeett
                                                                     1800
ccaccaagag caggtcctca tcatggagct tttttgcctc cctctgcaag gccattccag
                                                                     1860
aggegtatge tteaatgeac ceatggette cacaggaaca atcaggeeca tecagagaca
                                                                     1920
caacaaggtg gcccagttct gcagcacaga aggagcttcc gtggatcaat tcatgctgat
                                                                     1980
ggataattcc accaccgatt cctgtgcctg tgataagtgt aacaaagttt tccagtccct
                                                                     2040
tteettggee aaattteett teegeeaggg eageaeagtt geeateattg tetaceeaca
                                                                     2100
cagggagatg caaagtgtca gaaagggggg tectaaggte cacagagtte cactettgga
                                                                     2160
tcagtttggt tgaatgcagc acaattcctt cccgaggatt tacacggcca cctgtggaaa
                                                                     2220
tgcctactcc caaaattctg cagttcagtt ttacagcttc tgctgcagct tccacacaca
                                                                     2280
tctgtaggat taaattaatc ctctcttcat aggttttagg attgaactga gtatacttct
                                                                     2340
taactatttc accettcatg ctgactattg caacteggag gttegteeeg ccaagateaa
                                                                     2400
eggecaagge acttagagtt teaagaatat ggteaatate ttgagagata tteteettea
                                                                     2460
caggaggaaa gcagaatttc ttttgcagtg gctcttgaag atcgatagat ttqaqaaact
                                                                     2520
tcaaaatcct tggaacagca tttccatccc catatatctt tgaacaaggg tactgtttac
                                                                     2580
caaactgaag gtgcagtgct tgcaatattt tgtcttgggt gtcagcatcc cggacatgaa
                                                                     2640
gatcattete ecetgittee teetteeaat etgaaegigt teececaggi tggatcacag
                                                                     2700
gtgttcccaa aagctcccaa cttctcgaac ccccacagct gctgttccca atcatacagc
                                                                     2760
cagcatgggc aaccaactgt ataaactggt caaatgggac gtgtttaact gcacgaaagt
                                                                     2820
tgggatgatg ctcaatgccc ttcttccgca tcactcgaac catctctttg ctccctgcgt
                                                                     2880
caatatttgg aaacaggact agggtccgct tgttaaatga gataagtgca tccaatgtta
                                                                     2940
attcaaacat ttttatggaa tgcttaatgt cagtggtcac agggtgctgt agtgcaacaa
                                                                     3000
tgtaatettt agattttaca teateaceta gecacatgeg aatgatgete atgtagtett
                                                                     3060
tgttcttggc tgagagaagt ttgtcatagg aagggcagcc tgccaaaagg atgcgatcat
                                                                     3120
ggtcctcaca catggatatc aggtgctgct ctgcactgcg ggtgcagcac acatgataat
                                                                     3180
gagccagttt tgttatggca tgtctgatag agtcatcaat ggtcccactg acttccccac
                                                                     3240
cttcaatgtg aaggattcgg atgttcatca aggcagcaga tgtggccaga gccagggcat
                                                                     3300
caaacctgtc tccatgaaca atcatgatat caggcttcag gcgattaagg acatctggca
                                                                     3360
gcttcactag ggccaggcct actgactcca ccatggctgc ctcatcttct cccctcacaa
                                                                     3420
ttgtgtgtag cctggtgtta atgtcaaagt catcttgttc aatcattcga tatgtatttc
                                                                     3480
catagtcatc tatcaggtga gagccaagta ccacaacatc aagttcaaag aactcaggtt
                                                                     3540
cggttttaat gccaaacatg atcggggcaa gtttagaata atctgcacgg ttacaagtag
                                                                     3600
caacacaaac ccgcagcttt cggttatttc cattettete catgatttgc ttgtttcgtt
                                                                     3660
ttgagaggtt cttaaaatag agttccagac gccgtcagag gctccctccc acgccgccac
                                                                     3720
cgcgctcctc gggcgaggga cgaaccaagc gccacgaagc aggcagagcg cgagcctgcc
                                                                     3780
cctcggtttc cgcgctcacg t
                                                                     3801
```

```
<210> 6056
<211> 368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (360)...(200)
<223> similar to gi862343 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6056
ctggactttc acatggatcg taatagacaa cttcatcctg tttttctaaa aaggtattaa 60
tgattgttta aaacatattt tattatttgt aaaaatgcac tcaatttttt taaatgtaag 120
gaaaataaag atcacttgta atgccaccac tgagaatcac tattaacata taaaaaatgt 180
atgtgtataa atgtaatata catatacacg tgtatatata catgactata cacatgtatt 240
aagcagcatg tgtgtatata caagtagtat atgcatgtat atatacctgt acagacatac 300
gtatatatac acacgcacat acacatacta cttacatagc tacacatatc aatggagttc 360
taaaagaa
```

```
<210> 6057
<211> 8605
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7685)...(3974)
<223> similar to gi2224569 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6057 getgeacete ceaggggaca gtececacat gattacaaaa gecaggtgee eteateacee 60 gttacccctg acctgtccac ttgttttgaa taaaccttca ttctccaagc agatccccaa 120 acttccttgt ccttgttaca cgtctacctc acaacctcac aattcaacaa caggtaaata 180 cctggattca ctgatttctt tactgtcctt ctctgagggt tgggaaggtg ggggctagaa 240 aaggeteata attittaaae tettgggaat taaaettggg aattietatt eetaeagtgt 300 tttctctggg atttttagct cactgatcgc cctagaatag tgtgaactct ccagataggt 360 cetgetgtga taggecaggg gagtaggetg tgeagtgaeg gettagggta ataagtaatq 420 gttggaggac accagcatag gagcagagtt tagaacttaa gaggacaaga aagctgctca 480 gtggctggcg tatagctgtg aaggtaacca aacaccaaag agggagtctg tcattttat 540 aaggctggaa gcgaatgttc cttttctacc ttaacataca gtttaggggg ttgcaccaag 600 acaaagtttc caggctggag ggtaatacat atccagcgcg agtgaagtcc ccactccaac 660 atataccett tttgggtggg taaacacete tttgcatgtg gacagaaaat gtttatactt 720 aaacagacat attttgcata tttttatctg gagacttctt ctagttttat actcttccca 780 catctatgcc aatgccacca ttctaaaact tacactcctt ttctacccct ggtcttttcc 840 ttgtccttcc ctacaacttg gtagaggtcc attttgtctt acttcacact ttttttttt 900 ttaaataaaa cacaaaagtc tacgtcttgg tgtcttatcc gtgagtggga agtggtaagc 960 tggtgatggt cccatatttg ctatgacagg aacacagagg tggcagctta ggaagctggg 1020 gccacatete acaaggcagg acetggatge actgaatece ecetttgete cagcaactea 1080 gccagacatt taggcaggag cactaatgac cctttccatc ccacacagag ggtatggaac 1140 aggageeeet gttgtteeet tgeetgtggt etettaagee agteataeet ateceaaege 1200 cgtctccccc tcaggtgtgt agaagggaag atgaatacca cagagtcttt tgaatctcta 1260 tcaaatgtgg tttttttatt caacaactga caagcacttt tctacagctg cacttgtgga 1320 acatcacatg gcaaaaacag gagttttttc gctagacttt ttttttcttt ttaaccttat 1380 taaaaatgag attggtccta aaaatataga aagaaataaa tttaaattca caaaaaactg 1440 tacattatca aaaagtcact aaaacaccac atttggttat ataaaaagtc ccttttgctg 1500 taaaaggaac acagaaactt gttggtgttg atggtgtggt ttcttcctgt caaccagact 1560 gatgggaggg aagcaaaagg gcagggggtg ggttgtcttt ttattttaaa cctgctttcc 1620

```
ctaccaaata ctcttgtcat gaagagaaaa tccacctagc tcaagggggc agtgaagatg
                                                                   1680
aggaaagaaa agcaagaaat ggcccctttg atcatgccct atccctacca cccccaaccc
                                                                   1740
                                                                   1800
egetecagee eccaettett caaactgagg etaggaceee acceegecat atgagtgeet
                                                                    1860
ggtccctagg gaaagagatg gagctgggag aggaacacaa agcaggaacc atggagattt
                                                                    1920
cactececca tecaceteae aattteaete ecceatecae eteacaatga aattaateta
                                                                   1980
qcacatetta taccaqqqqa aaattqccaq ggggaaaaaag cagagccccc aactttaaca
                                                                   2040
gtttcaactg tctaacacaa agtttgttac agcgcagtta tttagataaa atataaatat
ttatgcataa tataaagtca attcaaatat tcttcaatcc accttttaaa agcaaaaaaa
                                                                    2100
                                                                    2160
aaatctcaaa taaaattaaa agttttgagg tttatctgac agaaaaggcg actttagaaa
                                                                    2220
taggctatga gggagaaggg gcataaagga ataaaggggc tgccccagga cctacactgc
                                                                    2280
ccctacccc ttcagtggct cttcagtgct gccagaatac aaggaatgct ccacctcacc
                                                                    2340
tggcaccccc accccccaat ggaacatttc ttggatgcct cagctctctg cttgggccag
                                                                    2400
ccagcagcca cctccccagt gcaagtaccc gtaatctctg aagggagggg ctctgctgag
                                                                    2460
caggaaaagc agggggccaa gtgcccatgg ctatagctgg gagtcagcag ctttcctctc
                                                                    2520
gtgttggggg cttaacttgg acatagtcac atgtagggca gtgatggacc cagaacccct
                                                                    2580
cetecetaet etectgtget ecagggtete tgetgetggg gaaggggtee tggggtatga
                                                                    2640
agtaaatgaa gaaaagccca actaaatggg attaggaaat gatccagttc taccactctc
                                                                    2700
ccgtagaagc ttaagattca aagctaccga gaagagaggg agttcctgct gaaagattgc
acagtetgaa gaggetggaa caaaaatgac caggagagag acacagcett gtetecagag
                                                                    2760
aaattgttcc tgtggtttcc caaagacaaa aaagtgatgg ttttaaacaa tgggaaaaat
                                                                    2820
gggaatgaaa acaggtactt ggggaaactg aatggatcct atcaaacaat acagggtcac
                                                                    2880
2940
cacacacaca cacacacage gegetetgag geegacacac acacacacac acacacacac
                                                                    3000
acacacaca acagegetet etetgaggee ggeeceattg etacetggee tecatettag
                                                                    3060
ggtgcaccca aactcagcaa tagttgtccc tgaggagttc ccaagagggt ttgggaagga
                                                                    3120
ggtggggaat gttgctgtat aggcccatga agccttcctg ccctctcccg agctacgtga
                                                                    3180
gtttcagaaa aggctggaaa ctcagcatgt gaggagcatc caacatcata caggggatag
                                                                    3240
ctatcggcag gaagatgggg acagaagaca gggacctctg aacatttttt tttcctttga
                                                                    3300
                                                                    3360
agggaaaaga tttgggagaa gagaaaagga gggaggaacc cgtacacgat agttttacat
                                                                    3420
tattggatga gagaaaatct gaaaactggg gggtgggagg tgggaaaaga aagacagcga
                                                                    3480
gaagcaggga agggactgaa catggaagca gcatgtccag ggcccggtgt ccggcgcgac
acacttggga gttaagtcca ctttactggc cgtcactgcg ggtccgcaca cagtacagag
                                                                    3540
tgtttcttgg tttcacacat tcactagaac tattgctatt gttaaataac cccagaatgc
                                                                    3600
tggggcacgt acaggggagg agaggaagca gggaggagga agtagggacg actttccccc
                                                                    3660
tccccatttt taattagcaa ataaaacaga aaagaaaaat tattttttc tttcttttt
                                                                    3720
tggcttttag tccagaagga cctcatctct gcacctctta cttgaggagc aagaggaggg
                                                                    3780
aagggagaaa gggatgtagg aataagagga tgtggggcac tgccaagggc aaggtcaaaa
                                                                    3840
atcagggttg tatctgactt gagtctggac ccagggcagc atcagcaggt gaaaatggca
                                                                    3900
ggtttttgtt tggaaggtgg gggggagatg ccacaaggtg actccccacc tcccttgcct
                                                                    3960
cacagattgg ccctgttttc cctgataaaa ctcctcccag cggctcttcg aagaagcggc
                                                                    4020
gcatgatgtg cccagccttg cctacttcag agtcatcctc gttgaaagtc tggcagttgt
                                                                    4080
                                                                    4140
caaataccag gagggcatca gccgcaaact cctctgagct ggtgtaccct cccctgagca
                                                                    4200
gccgctcccg catggtggaa aaatccatag gatttttgat gatgcgccgg tacccactca
ccaaacgtgg gttcacaggc tctaggaaag gccaggctgc atcatgggac tccatctcca
                                                                    4260
tcaggataat ctcgcaaaat gtgagatcac tgtggtggtt ccgcatagag agtcgccgcc
                                                                    4320
gcttggaggg ggagagccct tcttccgagt accgaggccc tgctgctggg ctttctcggc
                                                                    4380
ccctcaacag tacccggcgt cggcggccat caccctctga gaagttcagc gaataaccac
                                                                    4440
ttttccgctt ctggccacgc tttgggaaac caggcttctg agtgaattct ccctccacct
                                                                    4500
gctgagccaa acagacagta cagaaccaat ctccttctgg gacagcctcc atcttgggac
                                                                    4560
gatggcagta aatgtggcag ccacggtcac acccatcaca aagcagaaga aactcatcat
                                                                    4620
tgtcaccctt ccggcagact agacatgtca ctttgttgac agacttctcc caggcaatgg
                                                                    4680
acctetecag etggeecagg cacaageaca eetgggetge geteeggeae egetegaggg
                                                                    4740
tetggegeca gacacgaatg egagggtga teteatatga tatetetgta gtggtgecet
                                                                    4800
caggggcacc attaggtgtg ctaagcaggg ccttctccag cacaacctca tgagttggcc
                                                                    4860
agaggggete eegeaggtae egeegtteta cattetgtte eagggeagee ageegeatea
                                                                    4920
cagccaggtc caaagggttg gtagttttac gctgaggtgc cagtccctcc ctgccccgac
                                                                    4980
ctcgccaggt gatatcctcc tgggagtcgg agaggtgctc acagtaggcc aagtcttcac
                                                                    5040
```

```
gggtagagtc tgggctagga catgtccagc cccgaatctg cagatcagac atgataaccc
                                                                    5100
gctgctccag ctcctctacc cattgaagca ctgctaggtc tgtctcgtat gtcttctctt
                                                                    5160
tgggggacca gctcataatc ccttcttgaa aggcaggtag ttgcctgggc tcaaagatgg
                                                                    5220
                                                                    5280
ggtcagctga gggccgcagg cagacttcct gcaagaagtc cctgtgcttg ttaaggtgtt
tgtgaagtgc cttctcccgg atacctcggg ggtgtagggc cttgagcatg gcatccaaca
                                                                    5340
                                                                    5400
teteaggate tegtateeac caccageetg ageacatete aggtgggaca ggetgggetg
                                                                    5460
teagetgggt taggtaacge tgttccatet gtttgaagaa ettaetggga ggteteeete
teegtttggg etgteecage eetgtgggae tetgtggeat ttetecaggg teteetgete
                                                                    5520
                                                                    5580
qcctcttaqq qqccaaccca qccaaggqcq tggaagagaa ctgcactgga gaacaagggt
                                                                    5640
tggcagcact aggtctattc attggcttgg aggaggcaag ctgctgaggg gagggagtgg
gttggtcctc agaaactgca gggggcggtg tgggggcagc attgcagggc atctgggctg
                                                                    5700
                                                                    5760
agatgttaaa ccagagtgct tgaggatcag ggctggattc tgcctcatca ggctctggct
                                                                    5820
cctccggggg ttgtgatgga gctgggtcta gttttcccgg actgctatca ggtgtgagga
                                                                    5880
ctgagctgct caacagggag ctatggctct gagtctggct cagccaagac aggaaggctg
                                                                    5940
actggctgag gtcatgctgg ctctgaccca gtgacaaagg ggagccttct tgctccagga
                                                                    6000
accccttatg ggactgaagc tgaagctgaa gctgaggctg gggctgggca ggagcatgaa
gctgagcctc aggctgaagc tgggcctggg gctgttctga atcctgaccc ctgacagggg
                                                                    6060
                                                                    6120
acttaagatg cetaggttge atagaceegg gettagtttt tegaggtegg cetegggeee
gggcaggaga actggcagtg gtgttggagc cagctaactc catcttcata gagaagagg
                                                                    6180
cagggttgag tgacgcatgg gctgccactt ttaaggagtc agtttccttc tttatcacct
                                                                    6240
                                                                    6300
cctcaggaac taagttcccc tctgttcctt ctacaaagat accagccaaa tacggcaata
cccagtagcg acgtctgtag cggtcctgac ccagggagac cgcccgaagc atctgggatg
                                                                    6360
agtgaagcag ctttttgcga aagaaaagct gacgcttgct gagtttttct atctggcgct
                                                                    6420
ctagetetgg gatgetagat getgtggeat caacetetee atetettega eccetgegge
                                                                    6480
cagggacage tgctatagae tectettett cetettette catgecaetg gtcaceteca
                                                                    6540
tgatccgaga actgcgcctc cgtcccaggc attcctctgg cccttccatc tctacttcag
                                                                    6600
accgcccagt tcgcttggcc agaacagttt tcagcctccg gagccggcct tcaacaatcc
                                                                    6660
                                                                    6720
acttgttttt cctgtagctg gacatactct ccagagtctt gtcaatctca ttgatgatga
                                                                    6780
gggtggagcc attgagctca tgcacaagga aggccaggac agcagccttc tgctggggtg
                                                                    6840
gctgggcctg aaaaggctgg gtgcgcaggc ggtcacagag ggctggctct actccatatg
                                                                    6900
ccataaggaa gcagcgcagg atctctgaca cattgtctct tgtcagtggg atctcagaca
ccttctcccc caagatcttt agggactgac agtaggaggg aaagccagga tcatggagtg
                                                                    6960
cageetteag cageetgace ageaggtett geaceteace caagetgtea cettgacaca
                                                                    7020
                                                                    7080
ggagtccctc ctgcaggacc cccaggctag gcacatcttt ggcaggatca aagcccagca
ccttgccaaa gctatgcagg aactccacaa tggtcaagca gtctgagaag gctccactgg
                                                                    7140
                                                                    7200
gcaatgtcag accagggact cgtgagaagt caggcagggg ctggtggtca gtcagacaca
                                                                    7260
tatectetgt eggettette atttecteca agateatetg etgeetetge egttecteca
                                                                    7320
cctccttttc cttcattttt accttctcct tcttttccct cttgactttt tccttcagtt
                                                                    7380
                                                                    7440
ttteetgett tgtettteet ttttetttet cageettgga tttettetta getteettet
getttaaget ettggtetet tgttteeget tatttetgge etgeeettgg atagtagtet
                                                                    7500
gacactetee cegttgaace ttetgeetea tettettett gettttagea atetttgett
                                                                    7560
tatectecte atteaatgtt tettgggeet eeagtttett tagggggegg ttgtetgtet
                                                                    7620
                                                                    7680
tgttcaatag ctcagtgatt ttgaccttag gtggccgacc tcgaccccgt ttcaccttgg
ggacttcctt agtcctagcc ttctcagtgt ttcgaggtcg accccgtttg ccagtaattg
                                                                    7740
cetgaateet egaegggate teetetgetg agagetgeae ceaetgeaag eeetetggeg
                                                                    7800
                                                                    7860
tgtctctttc ttcaaagaaa tctccaacag gcatacgggg actgaagctg aagtgctctc
ggcggacact gtgtaccacg ttgcggctca ggtacttgat cacttctgga aattgcttca
                                                                    7920
tectettece acaggggeca taataccagg tetececetg ceateggtgg etgecettet
                                                                    7980
tgatgcgcac ctctctccgc cacccatgtt ggaggggaag acgaacttct tctggggtag
                                                                    8040
caatacgtct cctcatgaca tcaccactac cagaagcagt gagtccttct ccagtgatct
                                                                    8100
ettecaegte ageagtggtt tetagaaage tgetgaeate ettatttget ggggaggetg
                                                                    8160
ttggaaaggc agctgctggg gaagttacgg gagaggcttt tggggatgtc actgaagccg
                                                                    8220
tcaacgggac ttctaaggag actgctggga ggactgctga ggaagctgga gagaccactg
                                                                    8280
                                                                    8340
agaagactgc tggagagaca actgtagaag ctgcgggaca aacttctgga gagatttctg
gggaggetge tggagaaace actagggaga ctgctgggga ggttgttgge gagactgctg
                                                                    8400
gtgaggttgc tggatgtagc tgaatagtgg atgactgatc aggagctggc tgggtcaggg
                                                                    8460
```

atggtgggaa gtctgaagat tgagtttcca tttcttcctg ttcagcgtca ctaccattat 8520 tcaggtcaaa gctgttatct tgcaggacag actcccctag gacaggtgga gaggtgggac 8580 tggcaaagat agaggttgat gtttg 8605

```
<210> 6058
<211> 2632
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (87)...(539)
<223> similar to gi31843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6058 eggeggegte gaccagacae tgacaettge agttgtettt ggtagttttt ttgcaetaae 60 ttcaggaacc agctcatgat ctcaggatgt atggaaaaat aatctttgta ttactattgt 120 180 cagcaattgt gagcatatca gcatcaagta ccactggtgt ggcaatgcac acttcaacct 240 cttcttcagt cacaaagagt tacatctcat cacagacaaa tgatacgcac aaacgggaca catatgcage cactectaga geteatgaag tttcagaaat ttetgttaga actgtttace 300 ctccagaaga ggaaaccgga gaaagggtac aacttgccca tcatttctct gaaccagaga 360 taacactcat tatttttggg gtgatggctg gtgttattgg aacgatcctc ttaatttctt 420 acggtattcg ccgactgata aagaaaagcc catctgatgt aaaacctctc ccgccgccct 480 gacacagacg tgcctttaag ttctgttgaa atagataatc cagagtcaag tgatcaatga 540 gtatctgttc acccaaaccc aaatgtggaa agaacacaag gaggaccata ggacttccag 600 tcaagtgaaa aattaaccat gtggactgga ccctcccaat aaattatata cctgcctaag 660 ttgtacaatt tcagaatgcg aattttcatt ataatgagtt ccagtgactc aatgatgggg 720 aaaaaaatct ctgctcatta atatttcaag ataaagaaca aatgtttcct tgaatgcttg 780 cttttgtgtg ttagcataat ttttagaatt gtttgagaat tctgatccaa aactttagtt 840 gaattcatct acgtttgttt aatattaact taacctattc tattgtatta taatgatgat 900 tetgteaaat gaaaggettg aaatacetag atgaagttta gattttette etaattgtaa 960 actittgagt ctggtttcat tgttttaaat aaattaaggg gacactaaag tcctatcatt 1020 catttccttt cattggctga acagggcaag atataatatt acatgaatga ttactatatt 1080 ttgttcacac taataaagct tatgctcaga aatgccatac acacacacaa acacacacat 1140 ttatcattta atgcataaat caacacaaaa ggttttccca ttaatatgaa atattacata 1200 tatataagtg ccatatttaa aataatttgt ctaaacagta gaactatgtc ggagcactca 1260 ctgaagcttg cattccgctg aaagagttat ttgtgtaagt agagtatccg gagaaggaaa 1320 agaacttacg acctttcttt ataacagaaa gctcagctgt aaattcaaca agatgtgcaa 1380 accggacatg caggtgaata ttttaatagg ttactataag gttctcaatt aaattcttta 1440 atctgtccag tcccagtttc tcttattaat aaaactttgg aaattgcttt aaaccattta 1500 aaggaaattt ctagatatag aaactaagga ctgtgactat acagctgtca ctcatttgta 1560 gtaaaactta aaaagcaaaa acaaaaaaca aaaaagacct tcctgtgata ctttatttcc 1620 gaactaataa aaatctatat gactttttat tattgtgtga taaccaagta aatgttttct 1680 attttgcata ttttcaggca tggtaacaga aatttacctt ttaataaatt aaaaaatcta 1740 aattttaacc tacttgtatg ttcggagagt gtttttgtac tatattgact acttaaaata 1800 gagaatgaga ctaagaaggg aacatttctg ttgatacatg ttttttaaaa gtaattttaa 1860 gagcattatt aggttaattt aatccaatta atgacccaaa tgccaaggta attttaaatt 1920 tacattttta ataaaagcaa catgttgaaa caagagaggg tgagattaac ctttttgcta 1980 aagtaattta caagtcaaag acaggaagag atcagagtga atgtgccttc ttaaccagag 2040

```
ctacagaatt tagtgaataa ttaaagtaca aactgctttg acctccttga acttttccaa
                                                                     2100
gcaatttete tgtaetteta tatatgaatg tettageeaa ttttetgeta etataacaga
                                                                     2160
atacgacaga ctgggtaatt taaaaagaaa agaaatttat tttcttccta gttctggagg
                                                                     2220
                                                                     2280
ctgggaaggc gaagggcatg gcactgacat ctgccttgta actgatgaga accttcttac
tgcatgataa caaagcagca aggcaagcaa aagcgtaaga tgaagagaga ggaaatgaag
                                                                     2340
ccaaacacat cctttcatca gaagcccatt ccctctataa ggcgttatta catttatgag
                                                                     2400
aatggagtcc tcatgaccta atcgtgacct taaaggcccc tcccaacact gttacaatgg
                                                                     2460
caattaaatt tcaacaaagg ttccagaggt gacattcgaa tcagcaatga aattttcata
                                                                     2520
gttaaatttg gtattcgtgg gggaagaaat gaccatttcc cttgtatttt tataattaaa
                                                                     2580
tcagcaaaat attgtaataa agaaatcttt cctgtgaaga taccatgacc cc
                                                                     2632
```

```
<210> 6059
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (192)...(1785)
<223> similar to gi4680298 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6059 cgttcgtgcg tcctagttcc agtacagcgt ggagggttta ggcagcgtgt tctgattctt 60 tgcgggacgg cgagcgcatt tgtgctttgc ccgccgcggc ctaggaggcc ttttgaggcc 120 gegtagtegg tgtttttgaa etgaetetae agettetgge aggeegtgeg gegeeetgae 180 ccggcctcac catgttggtg ctgtttgaaa cgtctgtggg ttacgccatc tttaaggttc 240 taaatgagaa gaaacttcaa gaggttgata gtttatggaa agaatttgaa actccagaga 300 aagcaaacaa aatagtaaag ctaaaacatt ttgagaaatt tcaggataca gcagaagcat 360 tagcagcatt cacagctctg atggagggca aaatcaataa gcagctgaaa aaagttctga 420 agaaaatagt aaaagaagcc catgaaccgc tggcagtagc tgatgctaaa ctaggagggg 480 tcataaagga aaagctgaat ctcagttgta tccatagtcc tgttgttaat gaacttatga 540 gaggaattcc gttcacaaat ggatggatta atccctgggg tagaaccacc gtgaaatqqc 600 agctatgtgt cttggattgg ctcacagcct tgtctcgata tagattgaag tttagcgctg 660 ataaagtaga cacaatgatt gttcaggcca atttccttgt tagatgactt ggataaagaa 720 ctaaacaact acattatgcg atgtagagaa tggtatggct ggcatttccc tgaattagga 780 aaaattattt cagataattt aacatactgc aagtgtttac agaaagttgg cgataggaag 840 aactatgcct ctgccaagct ttctgagttg ctgccagaag aagttgaagc agaagtgaaa 900 gcagctgcag agatatcaat gggaacagag gtttcagaag aagatatttg caatattctg 960 catctttgca cccaggtgat tgaaatctct gaatatcgaa cccagctcta tgaatatcta 1020 caaaatcgaa tgatggccat tgcacccaat gttacagtca tggttgggga attagttgga 1080 gcacggetta ttgctcatgc aggttetett ttaaatttgg ccaagcatgc agettetacc 1140 gttcagattc ttggagctga aaaggcactt ttcagagccc tcaaatctag acgggatacc 1200 cctaagtatg gtctcattta tcatgcttca ctcgtgggcc agacaagtcc caaacacaaa 1260 ggaaagattt ctcgaatgct ggcagccaaa accgttttgg ctatccgtta tgatgctttt 1320 ggtgaggatt caagttctgc aatgggagtt gagaacagag ccaaattaga ggccaggttg 1380 agaactttgg aagacagagg gataagaaaa ataagtggaa caggaaaagc attagcaaaa 1440 acagaaaaat atgaacacaa aagtgaagtg aagacttacg atccttctgg tgactccaca 1500 cttccaacct gttctaaaaa acgcaaaata gaacaggtag ataaagagga tgaaattact 1560 gaaaagaaag ccaaaaaagc caagattaaa gttaaagttg aagaagagga agaagaaaaa 1620

```
gtggcagaag aagaagaac atctgtgaag aagaagaaga aaaggggtaa aaagaaacac 1680 attaaggaag aaccactttc tgaggaagaa ccatgtacca gcacagcaat tgctagtcca 1740 gagaaaaaga agaaaaagaa aaaaagaga gagaacgagg attaacagaa aggaattacg 1800 attatatcac ccggacacac atcatgctta agattcaact gggagcatac cagggatgct 1860 ctctaacgta atcaagggaa ggttcagtaa gacaaagtga tttatcatct ataacttcaa 1920 acctatttgt cttgacatca actctgttaa ccttatgtca tcattctta gagtctttga 1980 tatacaaata aaattttctt tgtattttaa aaaaaaaaa 2018
```

```
<210> 6060
<211> 4509
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4462)...(688)
<223> similar to gi2842424 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6060 gtcttgaagt gccactctat attttatttc ccagttaacc atgtctacat tttctaagat 60 cagtatattg ttttctttgt tatcatcatt aggctccata atataatttt acatcatata 120 ttattaaaca tttatgacta caagaaattc ttgaagctac ttctacatgt gatcatatca 180 aagtataaat tttgctaaca agacacgctg tgtaccacct tacagattta tagtttatgc 240 ggcagagtta gaaatctgtg acaagtccta acacttgtca catctcaatg tggttttcct 300 taaaaaaagc agccaatatc catgtaaaca gtacattgtg agatgtaaaa tttgattgat 360 agetectaaa tateateeca aatatacaca aattaaaaga ttattetaaa tgetttttea 420 tottacatat ccaagaaact cataaagata acattataaa aggcaacatt tgttaaaagg 480 ccactgtggt taactttatg tcactggagt caatactgca gccactgtca atttcctgga 540 600 tggttgaggt tagaagttga ttctttcaag gcaaacatca agtaattcga tttgtctaga tgactgaaca gagagaattc ttagccactc ctttcaaatg gattgttcag gtcaagttac 660 tttaatgcca ggtcagtcag ggaatcagag accttggtgt tgacctgtgc agaaagactc 720 gettgtgtaa egttgagata gatgteatae tgetggteea ggeeaaggta geagteaete 780 atgaaatata atgtgtagat ataccttcca ggtatttcag gggtataaaa agaaagggaa 840 gcaacatgat gatttcgaat atatcctact cttttcaaag caataagttc tctcttatcc 900 actteteeta atateaaaaa ceateetteg tettttgatt tgggaaateg aggagtaaet 960 gcacagetet etggetttee ettgtggaac ecaaagtgga etetetgeaa geteaettga 1020 agcacatact cttggtcagc atgcaatttg atccatttgt tgtcatctcg tttgtctgca 1080 gtcagagttg agacagagag ttcattatgt ccttcaacta agtcatccca cgagccttta 1140 acacttatgc caacatttat ctctggcaag tgagataaga aattccatgc ctgtttcgtt 1200 tttgcagcat gtagctcact ttctaccatg gagctaaata catqqtcttt ccctccacaq 1260 gcatggatca gttcaggaag gcactcgatg gaggtccgac ccctagcatg tgggcccttc 1320 ataatcggct tccatttctt gaaaaggtga agatgatggt tttctatgtt tggtagtgta 1380 agaagagaag agtcctttaa ccaccgaccc tggatcacca tctgaatcag gttqqtqata 1440 ttcaggacag tcaccagcca gccctggttt gcagccacgt ccagcattgc ctgacatact 1500 ctgagagett ggtccaagac tgttttggta tcagtgtcat aatctgggca gggtagcatg 1560 gctcggctga gatgtgcctg tagcaggaga tgtgctttgg tgtgagggct gtcaaatgaa 1620 tgaggatttg attcaatggg aagacatttt gccagttcac tattcatatg atcttcattg 1680 tgtctcactg gcaaatctgt atattcttct gcatcactta gaattgaaag cagttcttca 1740 gtactgcatt caggettcaa geggteettg aacattttaa etgtttgatg etteaaatag 1800

```
taataggagg caatteggee ataagttaga ggtteaatge tgegattate etetecaatt
                                                                     1860
tcaatacagt aggaaagttc caattcaatc agggacttct caatcagatg ggacagaaac
                                                                     1920
ttgttcacag aatcatggct cacatcaccc aaattgtaat agctgggatt catgataaga
                                                                     1980
                                                                     2040
cgtcggaaaa agtaagtcca ggtgatataa tccaatgcat cttgcttaga tgtaattgta
ccaccagcaa tctctgcatt taagtggtca gagagcactc ctaataaact tgattctact
                                                                     2100
gggaaaggtt cataaagaaa ttttttataa aagtctttct ttatgtcatg aactagaatt
                                                                     2160
acagettige etiggicate gaactgegge eteccageac gececateat etiggaggaca
                                                                     2220
tctgtaatgg ggaaatccac ataacgtctt gtttttccat catagtattc tgttccctta
                                                                     2280
ataattacta aatgagctgg aaagtttaca ccccaggcta atgtgcttgt agcaataaga
                                                                     2340
acctgaactt tacagtttac aaatagttcc tctactgttt ttcggtccct ctcatgtagt
                                                                     2400
ccagcatgat gcattcctat cccgaaagca agggtcagct tgaggttgga atctcttact
                                                                     2460
gttgcaatga tgttctccat ctctctttca tccatgttta accactgctt tggatcttct
                                                                     2520
tcagtagcca ggaaggcgat caattccaaa gcagtaagac gagtttgacg tcttgatgag
                                                                     2580
acaaatatca aaacaggttt ggctggagaa tggcttctaa ttgcctgaaa tgcaggcttg
                                                                     2640
ttcatactag ccatacgagg acagtaatgt tgacctggaa agccttgaat gtgaacttcc
                                                                     2700
agtggaactg ggcgtactga tggtcggaag ttaaacaagc ccatctgctt aatattgagc
                                                                     2760
caatcagcaa ggtctctggc attagctaat gcagtagata gtccaactat tctaacaggc
                                                                     2820
ttttctgtgt gtgatgagat aaaatttgtt cgagatacaa tgacctctag aacagggcct
                                                                     2880
ctttcctccc caagcagatg gatctcatct atgatgagaa tagtgacttg ctgaacatag
                                                                     2940
ttcctatttt gccagcttct gctgactcca tcccacttct ctggcgtagt gacgataagg
                                                                     3000
teageettgg caatggattt catateagga gteacateee etgttagtte aataaetttt
                                                                     3060
ttaccaagtt tttcttctat tctaactttc caatcatcca ttctttcacg tactagggct
                                                                     3120
tttaggggtg caatatatac cgcctttgaa gtagggtatt tgttgaagac tctgaaaatg
                                                                     3180
gctaattcag ctgcaacagt ctttcccgat ccagtaggtg ctccaagtag gacattacaa
                                                                     3240
tccgtgtgat acaatgtatg aaatatttgt gtctgtacag ggttaaagtg gctgaagttg
                                                                     3300
tacagggett catatgettt acateecaaa getgtgattg gtaaaggetg aagateeagt
                                                                     3360
aattctgtat gaggaggatg tctctctggt agaattagat gttgaaagtt gataatacat
                                                                     3420
actgcctcag cacccaacca tctatcagac actgctcgga tgtagtattg ggaaggcaaa
                                                                     3480
ggctcaaaaa tagggattgt aaataccagt agttgggctt ctttactaat gacttgtttt
                                                                     3540
tttagagcta gaaaatactc tgaatgataa atatgatcat ttgtaggatc ttctacccaa
                                                                     3600
atccaccaag gttctcctac tgtcccatgt acctgatcat tccaagtgaa atcagcatag
                                                                     3660
atgctgagtg tcactcggag gacagtcctt gtgataggct gaatgaatgc ttccatcata
                                                                     3720
acagaaggaa tctgatgaac acattgtttg accttcagtc caatattcac atgatgtaaa
                                                                     3780
atgtgaccta tttcatcttt cctcatgtct ttcagcttat ccacagtaag cttttttct
                                                                     3840
tctaatcttg ttagcatgtg tggtggtagg attgaaaatt gtctcaaagg gctagcccaa
                                                                     3900
ccccaaagcc tcttgtcaat ggctttacta agattcagga gcctgtaggt catggtaggc
                                                                     3960
caacgtttcc tcagagcaat ttcaaaaaga gcacggacaa ttctagctgc attctgtgca
                                                                     4020
acatatgcag aatctgatat aagggagaaa ctgtccattt ctcctcggtt gatataagtt
                                                                     4080
tgaagtaaga tgtttatttt cccataacta ttctctacac ctccaggagt ggagagttca
                                                                     4140
caaaaattgc ttaataaggt atctaactcc tctatttcct cttctctgac cttaatttga
                                                                     4200
tcaaattctt cagctttgga gactatggca aagatatcac cttctgtttt gtgagcatca
                                                                     4260
aagagttcat taaaggtctc aatggtgttg tatttaatat agtaatggct ggcagttcta
                                                                     4320
cccaaatcag ttgaggaaaa atatccagtt cgctcctcaa aacgaatcat ctgagctttt
                                                                     4380
gtctagtttt cgtccaacct tcaatgacca aactgttctc gatgctttct ttaatggtgg
                                                                     4440
gtcaatctga taagccttgt gactgatgcc atatgctaat ggatttgctc tcattcgcac
                                                                     4500
ataaagata
                                                                     4509
```

```
<210> 6061
```

<211> 3783

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (97)...(3515)
<223> similar to gi36501 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6061 gtgaatteeg caccatetet etectgeetg tggggtttet gteaactagt egtggaggga 60 aggagactct ttaaagaata acatcttatt gtggccatgc cagaacccac taagaaagag 120 gaaaatgaag tgccagcccc agccccaccc ccggaagaac caagtaaaga gaaggaggcc 180 ggaactacac cagcaaaaga ctggaccctt gtcgaaactc ctcctgggga ggaacaagcc 240 aagcagaatg ccaactccca gctgtccatc ttgttcattg aaaaacctca aggaggaaca 300 gtgaaagttg gtgaagatat caccttcata gccaaagtca aggctgaaga tctttctgag 360 aaacccacta tcaatggttc aaggaaatgg atggacctgg ccagcaaagc cgggaagcac 420 cttcagctga aggaaacctt tgagaggcac agtcgggtgt acacatttga gatgcagatc 480 atcaaggcca aagataactt tgcaggaaat tacagatgcg aggtcaccta taaggataag 540 tttgacagct gttcatttga tcttgaagtg cacgaatcta ctgggactac tccaaacatt 600 gacatcagat ctgctttcaa gagaagtgga gaaggtcaag aggatgcagg agaacttgac 660 tttagtggtc tcctgaaacg tagggaggtg aagcagcagg aggaagaacc ccaggtggac 720 gtatgggagt tgctgaagaa caccaaaccc agtgagtacg agaagatcgc cttccagtat 780 gaatcaccga cctgcagcgg catgctgaag cgactcaagc gcagcatcag agaggagaag 840 aagagcgccg cttttgcaaa aattcttgat cctgtatatc aggttgacaa aggaggcaga 900 gtgaggtttg ttgtggagct ggcagatcca aagttggagg tgaaatggaa taaaaatggt 960 caagaacttc gacccagtac caaatacatc tttgaagaca caagatgcca gagcatcctg 1020 aatatcgata actgtcagat gacagatgat tcagagtatt atgtgacagc cggtgatgag 1080 aaatgttcta ctgagctctt agtaagagag cctccaatta tggtgaccaa acagctggaa 1140 gatacaactg attattgtgg ggagagagtg gaattagaat gtgaggtgtc tgaagatgat 1200 gcccaagtaa aatggtttaa gaatggtgaa gagattatcc tggtccaaac aagataccga 1260 attagagttg agggtaaaaa acacatcttg atcatagagg gagcaacaaa ggctgatgct 1320 gcagattatt cagtaatgac aacaggagga caatcatctg ctaaacttag tgttgacttg 1380 aaacctctga agattttgac acctctgact gatcagactg taaatcttgg aaaagaaatc 1440 tgcctgaagt gtgaaatctc tgaaaacata ccaggaaaat ggactaaaaa tggcctacct 1500 gttcaggaga gtgaccgtct aaaggtggtt cacaagggaa ggatccacaa gttagtgata 1560 gatcatgccc tcactgaaga tgaaggtgat tatgtatttg cacctgatgc ctacaatgtt 1620 actotgcctg ccaaagttca tgttattgat cctcctaaga tcatcctgga tggtcttgat 1680 gctgacaaca cagtgacagt gattgcagga aacaagcttc gtcttgagat ccccatcagc 1740 ggagaaccac ctcctaaagc catgtggagc cggggagata aggctattat ggaaggcagt 1800 ggccggataa gaacagaatc ttaccctgat agcagcactc tggtcattga tatagctgaa 1860 agagatgact ctggtgttta ccacatcaat ctgaaaaacg aagctggaga ggcacatgca 1920 agcatcaagg ttaaagttgt ggacttccct gatcctccag tggcaccgac tgtgacagag 1980 gtgggagatg actggtgtat catgaactgg gagcctcctg cctacgacgg aggctctcca 2040 atcctaggat attttattga gaggaagaag aaacaaagct ccaggtggat gaggctgaat 2100 tttgatctct gcaaagaaac aacttttgag cccaagaaga tgattgaagg tgtggcctat 2160 gaggtccgca tctttgcagt caatgccgat tggcatctcc aagcccagta tgccctccag 2220 gccttttgtt cctttggccg taacaagccc tcctactctt ctgactgtgg actctgtcac 2280 tgacacgact gtcacgatga ggtggcgccc cccagaccac attggtgcag caggtttaga 2340 tggctatgtg ctagagtatt gctttgaagg aagtacatca gcaaaacagt ctgatgaaaa 2400 tggggaggct gcctatgatc tgccagctga ggactggata gttgcaaaca aagatctgat 2460 tgacaagacg aagttcacca tcacaggtct gccaacagat gcaaagatct ttgtgcgtgt 2520 gaaggetgtt aatgeagetg gtgeeagega geecaagtae tatteteage ceattetegt 2580 gaaggaaatc atagaacctc caaagataca cagtcccaag cacctgaagc aaacatatat 2640 ccgccgagta ggagaccgtg tcattcttgt tatccctttc cagggaaaac caagaccaga 2700 attaacttgg aagaaggatg gtgcagaaat tgataagaat caaataaaca ttcgcaactc 2760 tgagactgat acaatcatat ttattagaaa agcagagagg agccactctg ggaaatatga 2820 tetgeaagte aaagtggaca aattegtgga gacegeatea attgacatea gaateattga 2880

```
ccgtccaggt ccaccccaaa ttgtgaagat tgaggatgtc tgggggagaa atgtcgctct
                                                                2940
cacatggact ccaccaaagg atgatggaaa tgctgctatc acaggctata ccattcagaa
                                                                 3000
ggctgacaag aagagcatgg aatggttacg tgtcattgag catatcatcg aaccagtgcc
                                                                 3060
acatactgaa ttggtcatag ggaatgaata ttacttccgg gtcttttctg aaaacatgtg
                                                                 3120
tggcctcagt gaggatgcca ccatgactaa agagagtgca gtgatcgcca gggatggtaa
                                                                 3180
aatctacaaa aatccagtgt atgaagactt tgatttctca gaggcaccca tgtttactca
                                                                 3240
gcctttggtt aaccgcctat gccatagcgg ttacatggcc accctaaact gcagtgtgag
                                                                 3300
aggaaatcct aagcctaaaa taacctggat gaaaaacaaa gttgctattg tggatgatcc
                                                                 3360
3420
ctatgatgga ggcacttact gctgcaaagc agtcaatgac cttgggacag tggagattga
                                                                 3480
atgcaaactg gaggtgaaag tcattgcaca ataaggattt ttgaatgtat aatatcatct
                                                                 3540
aaggtgggct ctccttctgc agactcctct tgcaaggcgt acctccaaac ataattgatt
                                                                 3600
catatetgeg agaettacae teaageaate etgaggaata etgagggagg geetggetae
                                                                3660
tgtctctctg cactctgctg ctttgaaatc tggttgaaat gagaaaaagc attttctgtt
                                                                3720
ttcccaccag gcccccaagt gtggtctttt tctttcctcc taatgttgaa gagaaaaaaa
                                                                 3780
aaa
                                                                3783
```

```
<210> 6062
<211> 2799
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(2673)

<223> similar to gi288563 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6062 tggcatttgc atggtggccc tgtctcatct tggctctgct ctccagcttg gcagcctctg 60 getteeegag aageeeettt eggetgettg ggaaaeggag eeteeeagaa ggggtggeea 120 atggcatcga ggtctacagt accaaaatca actccaaggt gacctcccgt tttgctcaca 180 atgttgtcac catgagagcc gtcaaccgtg cagacacggc caaggaggtt tcctttgatg 240 tggagctgcc caagacggcc ttcatcacca acttcacctt gaccatcgac ggtgttacct 300 accetgggaa tgtcaaggag aaggaagttg ccaagaagca gtatgaaaag getgtgtece 360 agggcaagac ggccggcttg gtcaaggcct ctgggaggaa gttggagaag ttcacagtct 420 cggtcaacgt ggctgcaggc agcaaagtca ccttcgagct aacctacgag gagctgctga 480 agaggcacaa gggcaagtac gagatgtacc tcaaggtcca gcctaagcaa ctggtcaaac 540 actttgagat cgaggtagac atcttcgagc ctcagggaat cagcatgctg gatgctgagg 600 cctctttcat caccaacgac ctcctgggaa gcgccctcac caagtccttc tcagggaaaa 660 agggccatgt gtccttcaag cccagcttag accaacagcg ttcatgccca acctgtacag 720 actecetect caatggagat tteactatea ectatgaegt gaacagagaa teteetggea 780 acgtgcagat agtcaatggc tacttcgtgc acttctttgc acctcaaggc cttccagtgg 840 tgcctaagaa cgtggccttt gtgattgaca tcagcggctc catggctggt cggaaattag 900 agcagacaaa ggaggccctt ctcagaatcc tggaagatat gcaagaggaa gactatctga 960 atttcatcct gttcagtgga gatgtgtcca catggaaaga gcacttagtc caggccacgc 1020 ccgagaacct ccaggaggcc aggacgtttg tgaagagcat ggaggataaa ggaatgacca 1080 acatcaatga cgggctgctg aggggcatca gtatgctgaa caaggcccga gaggagcaca 1140 gaatcccaga gaggagcacc tccattgtca tcatgctgac tgatggggat gccaatgttg 1200 gtgagagcag acccgaaaaa atccaagaga atgtgcggaa tgccatcggg ggcaagttcc 1260

```
ccttgtataa cctgggcttt ggcaacaatc tgaattataa cttcctggag aacatggccc
                                                                     1320
tggagaacca tgggtttgcc cggcgcattt atgaggactc tgatgccgat ttgcagttgc
                                                                     1380
                                                                     1440
agggetteta tgaggaggtg gecaaceeae tgetgaeggg tgtggagatg gagtaeeeeg
agaacgetat cetggacete acceagaaca ettaceagea ettetaegat ggetetgaga
                                                                     1500
tegtggtgge egggegeetg gtggaegagg acatgaacag etttaaggea gatgtgaagg
                                                                     1560
gccatggggc caccaacgac ctgaccttca cagaggaggt ggacatgaag gagatggaga
                                                                     1620
aggccctgca ggagcgggac tacatcttcg ggaattacat tgagcggctc tgggcctacc
                                                                     1680
teaccattga geagetgetg gagaagegea agaaegeeca tggegaggag aaggagaaee
                                                                     1740
teaeggeeeg ggeeetggae etgteeetea agtateaett tgtgaeteea etgaeeteaa
                                                                     1800
tggtggtgac caagcetgag gacaacgagg atgagagggc cattgccgac aagcetgggg
                                                                     1860
aagatgcaga agccacaccg gtgagccccg ccatgtccta cctgaccagc taccagcctc
                                                                     1920
ctcaaaaccc ctactactat gtggacgggg atccccactt catcatccaa attccggaga
                                                                     1980
aagacgatgc cctctgcttc aacatcgatg aagccccagg cacagtgctg cgccttattc
                                                                     2040
aggatgcagt cacaggcctc acagttaatg ggcagatcac tggcgacaag agaggcagcc
                                                                     2100
ctgactccaa gaccagaaag acttactttg gaaaactggg catcgccaat gctcagatgg
                                                                     2160
acttccaggt ggaggtgaca acggagaaga tcaccctgtg gaacagggcc gtgccgagca
                                                                     2220
ctttcagctg gctggacaca gtcacagtca cgcaggatgg gctgtccatg atgatcaaca
                                                                     2280
ggaagaacat ggtggtctcc tttggagatg gggttacctt cgtggtcgtc ctacaccagg
                                                                     2340
tgtggaagaa acatcctgtc caccgtgact ttctaggctt ctacgtggtg gacagtcacc
                                                                     2400
ggatgtcagc acagacgcat gggctgctgg ggcaattett ccaaccettt gactttaaag
                                                                     2460
tgtctgacat ccggccaggc tctgacccca caaagccaga tgccacattg gtggtgaaga
                                                                     2520
accatcaget gattgteace aggggeteee agaaagaeta cagaaaggat gecageateg
                                                                     2580
gcacgaaggt tgtctgctgg ttcgtccaca acaacggaga agggctgatt gatggtgtcc
                                                                    2640
acactgacta cattgtcccc aacctgtttt gagtagacac accagctcct gttgggatgg
                                                                     2700
atggcccgga ttttatggca tctggaacat gggcacagag aggggcctgt gggaggggct
                                                                     2760
gggaaaataa agtccaaggt cgagaccaga aaaaaaaa
                                                                     2799
```

```
<210> 6063
<211> 2465
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (49)...(2275)
<223> similar to gil707522 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6063
gataaaccca caagacacaa aacatacctt tcgagcagtt gggccaagat ggcggccgcc
                                                                       60
gagggaccgg tgggcgacgg cgagctgtgg cagacctggc ttcctaacca cgtcgtgttc
                                                                      120
ttgcggctcc gggagggact gaaaaaccag agtccaaccg aagctgagaa accagcttct
                                                                      180
tegtegttge ettegtegee geegeegeag ttgetgaega gaaacgtggt etttggeete
                                                                      240
ggcggagagc ttttcctgtg ggacggagaa gacagctcct tcttagtcgt tcgccttcgg
                                                                      300
ggccccagcg gcggcggccg aagagcccgc cctgtcccag taccagagat tgctttgcat
                                                                      360
aaatccaccc ctgtttgaaa tctatcaagt cttgttaagc ccaacacaac atcatgtagc
                                                                      420
acttatagga ataaaaggac ttatggtatt agaattacct aaaagatggg ggaagaattc
                                                                      480
tgaatttgaa ggtggaaaat caacagtgaa ttgtagtacc actccagttg cggagagatt
                                                                      540
tttcaccagt tccacctctc tgactctaaa gcatgctgca tggtatccaa gtgaaatcct
                                                                      600
ggatccccac gtagtgctgt taacatcaga caacgtaatc agaatttact cactacgtga
                                                                      660
```

```
720
geogragaca cocactaacg tgataatact ttcagaagcc gaagaggaaa gtctagtact
                                                                      780
caataaagga agggcgtata ccgcatctct aggagagaca gcagttgcat ttgactttgg
                                                                      840
gccattggca gcagtcccaa agactctatt tggacaaaac ggcaaagatg aagtagtggc
atacccactg tacatcttat atgaaaatgg agagactttc ctgacataca tcagtctgtt
                                                                      900
acacagecet ggaaatattg gaaagetgtt gggteeattg eccatgeate etgeggetga
                                                                      960
agataactat ggttatgatg cgtgtgctgt actctgctta ccctgtgtcc ccaatatctt
                                                                     1020
                                                                     1080
agtgateget actgaateag gaatgetgta teactgtgte gtgetagaag gggaagaaga
agatgaccac acgtcagaaa agtcctggga ttccaggatt gacctcattc cttctctgta
tgtgtttgaa tgtgttgagt tggagcttgc tttgaaactg gcatctggag aggatgaccc
                                                                    1200
ttttgattct gacttttctt gtccagtcaa acttcataga gatcccaagt gtccttcaag
                                                                     1260
                                                                     1320
atatcactgt actcatgaag ctggtgtaca tagtgttggg ctaacttgga ttcataaact
                                                                     1380
tcacaaattt cttggatcag atgaagaaga taaggatagt ttacaggaac tctctacaga
acagaaatgc tttgttgaac acatcctttg tacgaagcca ttgccctgca ggcagccagc
                                                                     1440
                                                                     1500
tccaattcga ggattttgga ttgtacctga cattctggga cccacgatga tctgcatcac
                                                                     1560
cagtacctat gaatgcctca tatggccgtt attaagtaca gtccatccag cgtctcctcc
                                                                     1620
cctgctttgt actcgagaag atgttgaagt ggcagagtct cccctccgtg ttctggctga
aaccccagat tcctttgaaa agcatattag aagcattttg caacgtagtg ttgccaatcc
                                                                     1680
                                                                     1740
agcatttttg aaagcttctg aaaaggacat agcccctcct cctgaagaat gccttcagct
cctcagcaga gccacccagg tgttcagaga gcagtacatt ctcaaacagg acttggcaaa
                                                                     1800
ggaggagatt cagcggaggg tcaaattatt atgtgaccaa aaaaagaaac aactagaaga
                                                                     1860
tctcagttat tgtcgagaag agaggaaaag tctgcgggaa atggctgagc gtttagctga
                                                                     1920
caaatatgag gaagctaaag aaaaacaaga ggatatcatg aacaggatga aaaaactact
                                                                     1980
tcacagtttt cactctgagc tcccagttct ctctgatagt gagcgagaca tgaagaaaga
                                                                     2040
attacagetg atacetgate aacttegaca tttgggcaat gecateaaac aggttactat
                                                                     2100
gaaaaaggat tatcaacagc aaaagatgga gaaggtgttg agtcttccaa aacccaccat
                                                                     2160
tatteteagt geetaeeage gaaagtgeat teagteeate etgaaagagg agggtgaaca
                                                                     2220
tataagggaa atggtgaagc aaatcaatga tatccgcaat catgtaaact tctgacacca
                                                                     2280
ccaggagctg actcacacct gaactgaaca ccattgaagg cttaaaccca tattgtaaaa
                                                                     2340
caggtagaat tatctaattt ataaaaaggt gttttgatga cctttggtgt ggttcatctt
                                                                     2400
tttaaatatg ttgttttata ataattgagt aaatgctttt atttaaaatt tggaatgtgc
                                                                     2460
tttat
                                                                     2465
```

```
<210> 6064
<211> 1484
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(1377)
<223> similar to gi202212 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6064
gcggcacgga ggagctcaac atgcgtgagt gtatctctat ccacgtgggg caggcaggag 60
tccagatcgg caatgcctgc tgggaactgt actgcctgga acatggaatt cagcccgatg 120
gtcagatgcc aagtgataaa accattggtg gtggggacga ctccttcaac acgttcttca 180
gtgagactgg agctggcaag cacgttgccc agagcagtgt ttgtggacct ggagcccact 240
gtggtcgatg aagtgcgcac agggacctac aggcagctct tccacccaga gcagctgatc 300
accgggaagg aagatgcagc cagtaattac gccaggggcc attacaccat cggcaaggag
```

```
420
attgttgacc tagtcctgga ccggatccgc aaactggcgg atctgtgcac aggactgcag
                                                                   480
ggetteetea tetteeaeag etttggggge ggeaetgget etgggttege atetetgete
                                                                   540
atggagegge teteagtgga ttacageaag aagteeaage tagagtttge catttaceea
                                                                   600
geoceceagg tetecacage egtggtggag coetacaact ceateetgae cacceacaeg
                                                                   660
accetggaac attetgactg tgcetteatg gtcgacaatg aagceateta tgacatatgt
                                                                   720
eggegeaace tggacattga acgteceacg tacaceaace tcaategeet gattgggeag
                                                                   780
atogtgtcct ccatcacggc ctccctgcga tttgatgggg ccctgaatgt ggacttgacg
                                                                   840
gaattccaga ccaacctagt gccgtacccc ggaatccaat ttccccatgg cacacttacg
ccccaatcat ctcagctgag aaggcctacc acgagcagct gtctgtggcc gatatcacca
                                                                   900
atgcctgctt cgagccagcc aatcaaatgg tcaagtgtga ccctcgccac ggcaagtaca
                                                                   960
                                                                  1020
tggcctgctg catgttgtac aggggggacg tgggtcccca aagacgtcaa cgcggccatc
                                                                  1080
gccaccatca agaccaagcg caccatccag tttgtggatt ggtgcccgac tggatttaag
gtgggcatta actaccagcc ccccacagtg gtccccgggg gagacctggc caaggtgcag
                                                                  1140
egggeegtgt geatgetgag caacaceaeg gecattgegg aggeetggge eegeetggae
                                                                  1200
cataagttcg atctcatgta tgccaagegg gcctttgtgc actggtacgt gggagaaggc
                                                                  1260
atggaagagg gagagttete tgaggeeege gaggaeetgg cagetetaga gaaggattat
                                                                  1320
gaagaggtgg gcgtggattc cgtggaagct gaggctgaag aaggcgaaga atactgaggg
                                                                  1380
gagggtgtgg tgggttctcc actccactgc cacccccatg cgtggctgct ttcaagttct
                                                                  1440
1484
```

```
<210> 6065
<211> 2821
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2822)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (21)...(693)
<223> similar to gi57516 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6065
ccagggggca acaggagcag cagctettet tgcaggaggt gcatttgcac tttttgcact
                                                                  60
tgcaggagcc ggcgcaggcg caggagccac cagcctcgca ggagcagttg gggtccattg
                                                                 120
180
gggcgtggag ggagcacagg ggtggccagc gtagggtcca gcacgtgggg tggtacccca
                                                                 240
                                                                 300
ggcctgggtc agacagggac atggcagggg acacaggaca gaggggtccc cagctgccac
ctcacccacc gcaattcatt tagtagcagg cacaggggca gctccggcac ggctttctca
                                                                 360
ggcctatgcc ggagcctcga gggctggaga gcgggaagac aggcagtgct cggggagttg
                                                                 420
cagcaggaca tcaccaggag ggcgaagcgg ccacgggagg ggggccccgg gacattgcgc
                                                                 480
agcaaggagg ctgcaggggc tcggcctgcg ggcgccggtc ccacgaggca ctgcggccca
                                                                 540
gggtctggtg cggagagggc ccacagtgga cttggtgacg ctgtatgccc tcaccgctca
                                                                 600
                                                                 660
gcccctgggg ctggcttggc agacagtaca gcatccaggg gagtcaaggg catggggcga
gaccagacta ggcgaggcgg gcggggcgga gtgaatgagc cctcttcttc tttttcatcc
                                                                 720
eggteacttt tggttacagg acgtggcage tggttggacg aggggagetg gtgggcaggg
                                                                 780
```

```
tttgatccca gggcctgggc aacggaggtg tagctggcag cagcgggcag gtgaggaccc
                                                                      840
catctgccgg gcaggtgagt cccttccctc cccaggcctc gcttccccag ccttctgaaa
                                                                      900
gaaggaggtt taggggatcg agggctggcg gggagaagca gacaccctcc cagcagaggg
                                                                      960
gcaggatggg ggcaggagag ttagcaaagg tgacatcttc tcgggggggag ccgagactgc
                                                                     1020
gcaaggctgg ggggttatgg gcccgttcca ggcagaaaga gcaagagggc agggagggag
                                                                     1080
cacaggggtg gccagcgtag ggtccagcac gtggggtggt accccaggcc tgggtcagac
                                                                     1140
agggacatgg caggggacac aggacagagg ggtccccagc tgccacctca cccaccgcaa
                                                                     1200
ttcatttagt agcaggcaca ggggcagctc cggcacggct ttctcaggcc tatgccggag
                                                                     1260
cctcgagggc tggagagcgg gaagacaggc agtgctcggg gagttgcagc aggacgtcac
                                                                     1320
caggagggcg aagcggccac gggagggggg ccccgggaca ttgcgcagca aggaggctgc
                                                                     1380
aggggctcgg cctgcgggcg ccggtcccac gaggcactgc ggcccagggt ctggtgcgga
                                                                     1440
gagggeecae agtggaettg gtgaegetgt atgeeeteae egeteageee etggggetgg
                                                                     1500
cttggcagac agtacagcat ccaggggagt caagggcatg gggcgagacc agactaggcg
                                                                     1560
aggcgggcgg ggcggagtga atgagctctc aggagggagg atggtgcagg caggggtgag
                                                                     1620
gagcgcagcg ggcggcgagc gggaggcact ggcctccaga gcccgtggcc aaggcgggcc
                                                                     1680
tegegggegg egaeggagee gggateggtg ceteagegtt egggetggag aegaggeeag
                                                                     1740
gtctccagct ggggtggacg tgcccaccag ctgccgaagg ccaagacgcc aggtccggtg
                                                                     1800
gacgtgacaa gcaggacatg acatggtccg gtgtgacggc gaggacagag gaggcgcgtc
                                                                     1860
eggeetteet gaacacetta ggetggtggg getgeggeaa gaagegggte tgtttettta
                                                                     1920
cttcctccac ggagtcggca cactatggct gccctctggg ctcccagaac ccacaacatg
                                                                     1980
aaaggtgagg ggetteetge cacaettggg gtggggggca egegagagga getgagtggg
                                                                     2040
acctcactcc ttccccatcc acagaaatgg tgctacccag ctcaagcctg ggcctttgaa
                                                                     2100
teeggacaca aaacceteta gettggaaat gaatatgetg caetttacaa ceaetgeact
                                                                     2160
acctgactca ggaatcggct ctggaaggtg aagctagagg aaccagacct catcagccca
                                                                     2220
acatcaaaga caccatcgga acagcagcgc ccgcagcacc caccccgcac cggcgactcc
                                                                     2280
atcttcatgg ccacccctg cggcggacgg ttgaccacca gccaccacat catcccagag
                                                                     2340
ctgagetect ccagegggat gaegeegtee ccaccacete cetettette tttttcatee
                                                                     2400
ttctgtctct ttgtttctgg agctgagctt tcctgtcttt cctttttct gagagattca
                                                                     2460
aagcetecae gactetgttt ecceegtece ttetgaattt aatttgeaet aagteatttg
                                                                     2520
cactggttgg agttgtggag acggccttga gtctcagtac gagtgtggcg tgagtgtgga
                                                                     2580
ggccaccttt gggcaaagtg gctgtggcag gggcccgggc ggcccttcca tctggggccg
                                                                     2640
ggtgaatggg gcgccggctg tgtgccgagg cctcaccctg ccctcgccta gtctggaagc
                                                                     2700
teegacegae ateaeggage ageetteaag catteeatta egeeceatet egetetgtge
                                                                     2760
ccctccccan cagggettca gcaggagece tggactcate atcaataaac actgttacag
                                                                     2820
                                                                     2821
```

```
<210> 6066
<211> 4829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (521)...(3429)
<223> similar to gi3327208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6066
tcagtgtggt ggaattccac agagtatatc agtcctatcc agctcattac cgatgaatgt 60
gagaataact tacatggcta atagtagtag agtatctctc ctgggttttt ctttcttca 120
```

```
agtgettata getaaataca ttetgggaac aettagaaet tgetaattea gtattgetae
                                                                      180
ttttacagat gagcctgaag tcttgacaga acctccaagt gccacaacca ctactaccat
                                                                      240
aggtatatet geaacetgga caactttgge aggtteteat ggtaaaagaa ataataceat
                                                                      300
aactacaacc agttcaaaga ggaaaaacag gaaaaataaa attactccag aaaacgttca
                                                                      360
aattatattt gatgatccac taccaatttc atacagtcag ccagagaagg tgaatggaga
                                                                      420
gtccaagagc agcagtacca gcgagagtgg ggacagtgat aacatgagga tttccagctg
                                                                      480
cagcgatgaa agtagtaaca gcaacagcag togtaagagt gacaatcatt caccagctgt
                                                                      540
ggtcactacc actgtgagca gcaaaaagca gccatcagtt cttgttacat ttccaaagga
                                                                      600
agagagaaaa tetgtttetg geaaggette aataaaattg teagaaaeta teagtgaagg
                                                                      660
gaccagtaat tetetateta ettgtacaaa atetggteea teteceettt etteteeaaa
                                                                      720
tgggaagtta acagtagcaa gtcctaagcg tgggcaaaaag agggaagaag gatggaaaga
                                                                      780
agttgtaaga aggtcaaaga aagtatctgt tccatcaact gtgatatcca gagtgattgg
                                                                      840
aagaggaggc tgtaatatca atgctattcg ggagtttact ggtgcacaca tagatattga
                                                                      900
taaacagaaa gacaagactg gagaccggat aatcactata aggggtggca ctgaatcaac
                                                                      960
aagacaagca actcaattga ttaatgcttt gatcaaggat ccagacaaag aaattgatga
                                                                     1020
acttattcca aagaatcgtt tgaaaagctc ctcagcaaat tccaaaatag ggtcatcagc
                                                                     1080
acctaccacc actgctgcta acacttcctt aatgggaatt aaaatgacaa ctgtagctct
                                                                     1140
gtcatcaaca tctcaaactg ccacagcact cactgtgcct gcaatttctt ctgcatccac
                                                                     1200
tcacaaaacc attaagaacc cagtgaataa atgtgaggcc tggttttcca gtttcttttc
                                                                     1260
catttagcat atcetectee acagtttgca catgetttge ttgetgetea gaetttecag
                                                                     1320
cagateegte caccaaggtt geccatgace caetttggag gtaettttee accageteaa
                                                                     1380
tecaettggg gteegtttee tgteaggeet ttgageeetg ceagagetae taaetegeet
                                                                     1440
aagcetcaca tggtgcetcg ccatagcaat cagaatagca gtggttetca ggtgaattca
                                                                     1500
graggithett taacticaag cecaacaact acaaccagit catcagette aacqqtqcct
                                                                     1560
ggtacatcta caaatggcag tccaagttca ccttctgtcc gaaggcagct ttttgtcaca
                                                                     1620
gttgtgaaga catccaatgc caccacaaca acagtcacaa ccacggcaag caacaacaac
                                                                     1680
actgcaccca caaatgccac atatcctatg cctactgcca aagaacacta tccagtatca
                                                                     1740
tececatett ecceateace accageceag ecaggagggg tttetagaaa eagecetttg
                                                                     1800
gattgtggat cagcatctcc aaataaagtg gcatcttcct ccgaacagga agcaggtagt
                                                                     1860
ccaccagtag tagaaacaac aaacactaga cctccaaaca gcagcagttc ttctgggagt
                                                                     1920
tcatcagctc attctaatca gcaacaacct ccgggatctg tttctcagga accaagacca
                                                                     1980
cetetteage agteteaggt teeteeceeg gaagttagaa tgaetgttee teetttagea
                                                                     2040
acaagttctg ctccagtggc ggtgccttct actgccccag tgacttaccc tatgcctcag
                                                                     2100
acaccaatgg gatgccccca gcctactcct aaaatggaaa cccctgctat tagaccaccc
                                                                     2160
cctcatggca caactgcccc tcacaagaat tcagcttcag tgcaaaattc atctgttgca
                                                                     2220
gtcctcagtg tcaatcacat taaaagacct cacagtgttc cctcttctgt ccagctacct
                                                                     2280
tcgaccttaa gtacacaaag tgcttgtcag aattcagtac atccagcaaa taagcctatt
                                                                     2340
geteceaatt teagtgeece ettaceattt gggeeettta geacattgtt tgaaaacage
                                                                     2400
cetaettetg eteatgeett etggggagga tetgttgttt cateteagte aacaccagaa
                                                                     2460
tctatgctat caggaaaatc ctcatatttg ccaaattcag atcctttaca tcagtctgat
                                                                     2520
acticcaaag ciccaggitt tagaccacca tiacagagac cigciccaag teectcaggit
                                                                     2580
attgtcaata tggactcgcc atatggttct gtaacacctt cttcaacaca tttgggaaac
                                                                     2640
tttgcttcaa acatttcagg aggtcagatg tacggacctg gggcacccct tggaggagca
                                                                     2700
eccgcagetg ctaactttaa cagacaacat tttteccege ttagtttgtt gacteegtgt
                                                                     2760
tcatcagcat caaatgattc ttctgcacag tcagtatcct cgggagttcg tgcaccatct
                                                                     2820
cctgccccat catcagtacc gttagggtca gaaaagccca gcaatgtgtc tcaggacagg
                                                                     2880
aaagttccag tccctattgg gactgaacgt tctgcacgta tcaggcaaac tggaacgtca
                                                                     2940
gctccatctg ttattgggag caatttgtct acatcagtag gacatagtgg catctggtcc
                                                                     3000
tttgaaggga ttggtggcaa tcaagacaaa gtagactggt gtaaccctgg gatgggaaat
                                                                     3060
cctatgatcc acagaccgat gtctgaccca ggagtatttt cacaacatca agcaatggag
                                                                     3120
cgagatagta caggaattgt aactccttct ggtacattcc atcagcatgt tcctgcaggc
                                                                     3180
tacatggact ttcctaaagt tgggggtatg cctttttctg tgtatgggaa tgcaatgatt
                                                                     3240
cctccagtag cacctatccc tgatggtgct ggaggaccca tatttaatgg ccctcatgct
                                                                     3300
gcagaccett ettggaacte actgataaag atggttteca getecacgga aaataatgge
                                                                     3360
cctcaaacgg tgtggactgg accctgggca cctcacatga acagtgtgca tatgaaccag
                                                                     3420
cttggctgat gaggatcagc ttgttagcct gcagattcct tttcatttgg aggaaatcac
                                                                     3480
aagtggccga aaaaaaaaat tatgctccca aatcattcta ctgatgtgct tgactgaagt
                                                                     3540
```

```
gtgtaggctt tttgcagaag atcttactaa ctgacctatt ttctgtgaac atttgtgact
                                                                     3600
gcccattccc catcatcatc cgttttacct tagttagcat ttttcttatc atttttcttt
                                                                    3660
                                                                    3720
ttttctttcc ctcttcccct ttggacataa ctttctgttg aagctgttct ttggctggtt
                                                                     3780
ggttttagta ctgtaaactg cttctgagca aacacggaaa tttagcaaaa ttatgtaaac
                                                                    3840
ttqatcctqa agttttagaa tggcaaataa atgtacaatt gtttacataa cagaaaaggc
                                                                    3900
taaqcaqaaa qtaaatttca atatgtcagt atagaggctc tactttatgt agacttaaat
                                                                     3960
taatgtgaga tatgtacctt catattcaga aatctggatg tttccttcat acattaaact
attaataagc ataacttttc tactggtgta atttaagtat aaagtaaaat aatgggcatt
                                                                     4020
atcattggat gtttccccac attggctttt aaaataccca tcttgctttc tttttggttt
                                                                     4080
atttgtagca aggcacatat agaagaagaa atttctggct tttccatgtt gttttattac
                                                                     4140
cttttctcac ttttagaact aatacagact tatctcctca ctccttttc tctccttacc
                                                                     4200
tttaccacta ataccagtaa aattatcttt ctgatagtga aaaggttctg tcaagatttt
                                                                     4260
cactgtaatg gctgctacag agatggacca tcttcatcat caccagtggt ttcttctaat
                                                                     4320
tataaaatgt ttaaactttc tgagaattta aaaagccacc actgttccca gtcagcatat
                                                                     4380
acaagctctt aatattctgt ttattaaata attcaatgta ctattttata ttggatgata
                                                                     4440
ttgattctta acattggctt ttcagtcatc aacagtcaac ataaaaattt caattttcag
                                                                     4500
taatttagtg gaaaatatct tatttetttt tteaatttta aaggetteet gettttttae
                                                                     4560
ccttgtatat tatcagtgaa aaggatcaac agttaatttg agccaagtaa taaaagaaat
                                                                     4620
tetgeatttg teacgaagae aatttatggt agacagataa atacacagat tacagtgtaa
                                                                     4680
agtotocatt taacotgoot ataaaagata caaggocaca ctaaactact cagtgggatt
                                                                     4740
tactatattc catccacttg aaacaataaa cagtaatgta tccaagaaga ttatgtgtcc
                                                                     4800
taccctqtct catqqaaaaa ttaattata
                                                                     4829
```

```
<210> 6067
<211> 1801
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1270)...(197)
<223> similar to gi4337106 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6067
ttttttttt ttaaaccaca aatgggggat ttatttctga ctctcagccc gtctctcacg
                                                                      60
aagacagage ctattgacca aaaacttcag gatctgcatc tgagcagatc ccaggaaggg
                                                                     120
gaagtcaaag ggcccaggtc agaggcccaa gttcagactt cagcagcaga ctagggtcag
                                                                     180
actitaccaa agtcagaact cgaggttcat gtaagtcctt agatcccgct cccaagccct
                                                                     240
gtetttette eteceteett eteteetee teeageteag tgtggeeace egagggggg
                                                                     300
atctccctcc cagccacage tegggtatec caagetggga aatgtgtcae teggggetqq
                                                                     360
ggtgctgatc tgtagcctag tccttcctgg tccctcttga ggacagtggg gatgggattg
                                                                     420
gcacggccct caccccgggg teccageccc attectggct eccagecece ectcagcage
                                                                     480
agtttgaagc ccgggctgga gatgggcacc ccaagtggaa ggttgggagg ctgaggaccc
                                                                     540
tgcgacagtg acagcaggtg agcagtggat gtgcggtggt tggaatcttg gaagtgggtg
                                                                     600
teacagttet egeagtactg gagggaggga gtaggagaee ggtttteegg geteettgte
                                                                     660
tetecatgge tetecetgae catgeggget aceteaggga agecagette tteagegage
                                                                     720
tgagccgcat ccctgccact cagctcacag acccccaccc aggcagcccc acggcccagg
                                                                     780
agatagetea cagetgeece etggeeeget egageageae acateagtgg ggteeaceag
                                                                     840
aaggcatccc gggcgttgat attcccccca gctcctcctg cctcatgcgg ttccagcagt
                                                                     900
```

```
ctcctaagtt ctggcaggtc cccctcctgg gctgccctca gtatccggtg agtcatctta
                                                                     960
                                                                    1020
tectcageet caagggatet ceettgteea tgtetteetg atgeteette tgeeactget
                                                                    1080
tetgetgetg gtgeetteat tattettett ttetttetet ttetttetet ggeaggttea
gtctgagatc tctgggagtc aggagcgctg ctctcatccc caatcagggc ctcatagaaa
                                                                    1140
                                                                    1200
getegggetg cagececate cagggtggae tetggettet egggetgtgg etgetgetge
                                                                    1260
ccatccttcc agaggtcgct ggggtcagtg gctggggtga aggtgatgag caagggccgg
gacatggctt ttgggagaac tgagaaaatg ataccaggca agggaaggat gagacaagta
                                                                    1320
                                                                    1380
agccaagctc gtggtgaccc tgtagcaacc acagcctcag agaccagtag gaaaaaaaaa
                                                                    1440
tcagcctggc cctttaagtc ttccgcgatc ccatttcgga gtttcctctt cccaaacaaa
aatagatggg tcactcccta gaagatctcg gggagagtct cctatacgtg ttgctgtgta
                                                                    1500
                                                                    1560
getteegtae egcaaaatgg egceattete teeceteatg aggeaggage eeggaggaaa
                                                                    1620
cagtatgece gtcaagggte tetggeggga etgattegea etaggggeee aacaggeaat
aaggacccag cggattggcc gaggataggc cagtcccctg ggcagcagcg ccgcgccggg
                                                                    1680
actagagggg aacgtgagga gagctgcgga aagagatcca gcctggctcc ctcctttccc
                                                                    1740
cgccctaagt cagcctcttc acccagtgag cacaaaactg tattgcccag actcccgggc
                                                                    1800
                                                                     1801
```

```
<210> 6068
<211> 2461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (544)...(1667)
<223> similar to gi4406600 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6068
                                                                       60
agatacgtat tgagttgtgt agctcaggaa tactgtgttc ccaactaaat accttccaca
aaagtgctat taaaagaagc tgtacctctg aagataaagt gggccagtct gaagctctat
                                                                      120
ctagagtcct tcaagtagct aagaaaatga agttgatttc taatggagga gattctgctg
                                                                      180
                                                                      240
taqaaatqqa tcggagaaat gtgtctgaat ttaagagtat taaaaaaaaca tcattaataa
                                                                      300
aaaactgtga ttctaaaagc cagaagtata attgtttagt catggtgcta tctccatgcc
atgtgaagga aataaacata aaattcggac caaattctgg ctctaaagtg cctttagcaa
                                                                      360
                                                                      420
cagttacagt aattgatcaa tcagaaacta agaagaaggt ttttctgtgg aggactgcag
                                                                      480
cattttgggc atttacagtg tttcttggag atataatttt actcacagat gttgttattc
                                                                      540
atgaggacca atggattggc gagacagtac tacaatcaac atttagcagt cagttattaa
atcttgggga gttattcatc tattcagcct gaagaatatt cccagtgtag tttgtggaag
                                                                      600
                                                                      660
ttgtacttca agacttactg gccatatgtg tcccccaaaa cattcctacc tcagagatct
                                                                      720
teceteegag ggeageeete agagggtgaa cagtatagae tttgtaggaa ttgggageae
cttcaacctg atgtgttagt ccacgcagta ctaagagttg ttgatttcct atactgacag
                                                                      780
                                                                      840
aggcagtata cagttataga ggacagaagc agaaaaaagt tatgttaaca gtggaacagg
cccaagatca acattatgcg cttgtattat ggggtcctgg agcagcctgg gtaccctcaa
                                                                      900
                                                                      960
cttcaaaqqa aaaaaggtta tatttgggaa tttaaatatc tttttgttca gtgcaattac
                                                                     1020
acactagaaa acctagaatt gcatacaacg ccttggtcat cctgtgagtg cttgtttgat
gatgatataa gggcaattac atttaaagca aaatttcaaa aaagtgcacc ctcctttgtg
                                                                     1080
aagatatcag acttagcaac ccacctagag gataagtgtt caggagtggt tctgattaaa
                                                                     1140
                                                                     1200
geccagattt cagagetgge atttectatt acageatete agaagatage getaaatget
cacagttete tgaagagtat tttttettet etteceaaca tegtatatae tggetgtgea
                                                                     1260
```

```
1320
aaatgtggat tggaactaga aacagatgag aacaggatct acaaacaatg ttttagctgc
ttgccattta ctatgaagaa aatatattat aggccagcgt taatgactgc cattgatgga
                                                                     1380
                                                                     1440
agacatgatg tttgtatccg tgtagaatca aagctgatag agaagattct tctcaacatt
                                                                     1500
tetgeagact geeteaacag agtgatagtt cetteeteag agateaceta tgggatggte
gtggcagacc tgttccactc cttgttggca gtcagcgcag aaccttgtgt attaaagatt
                                                                     1560
                                                                     1620
cagageettt ttgtgttaga tgaaaacage tatecattae aacaagattt eteceteetg
                                                                     1680
qatttttatc ctgacattgt aaagcatgga gccaatgccc gtctctgagg ccagaggaag
aaattgcagg catttcaagg aagaagtact gaaatgattt gtcttttgaa ataaatgaat
                                                                     1740
gacagggctt ttgctttgga ttttttatga aatatatttt acaaagagaa ttgcactaga
                                                                     1800
                                                                     1860
tatataaatt aaaacttttt tctaagaaaa tcctgtgagg tttaaaaaaga ttgtttttgt
cttttggttt cttcctttct cctggagaaa tgatctacca gtcaaggcaa tatgtagcag
                                                                     1920
                                                                     1980
atccctggga attaaaggtt tgcccatttg ttcactgtat ttagtccctg ctacattcca
                                                                     2040
ggcattgtac taagtatggg gaaccacaga gaagacattc cctcagaaac tgctgcagtg
ctttcgctta tccctaccta aaaaaccgtc aatgtgaaat catttccttg attataacta
                                                                     2100
taatgataat ggattagttt atataaacct atgtttagac aagttcaaga caagcgtgtc
                                                                     2160
                                                                     2220
tttctataaa aagtattgaa aatgaaggaa atgagatcat gtttcaattt attaaagcag
                                                                     2280
ggaagagcat tetgtggtta gttegtgtet aggatttgag tgeettaetg aatgeattta
                                                                     2340
ccagcaaaca tgtagcaatc tgttctctca ttgtgattgt ggaagaagct catgtaaaat
                                                                     2400
gatagtcatt aatgaggaag tatggcgtgg tacttattct gtaagttcag agtatgctga
                                                                     2460
gtgttaatag attatcatat tgcctgaaaa taaattcatg atgacatgaa caaaaaaaaa
                                                                     2461
```

```
<210> 6069
<211> 2083
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (78)...(641)
<223> similar to gi5689810 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6069
                                                                       60
ggcacgcgca cgaacgcacg gccgcgcagc atctgtcttg ctggaagctt tttcctagag
gttgageggt ttgcacaatg teggaaatgg etgagttgte egagetgtat gaagagagea
                                                                      120
gtgacctgca gatggatgtg atgcctggcg agggtgacct tccgcagatg gaggtaggca
                                                                      180
                                                                      240
gegggageeg ggagetatee etgegteeet eeegeagegg ggeeeaaeag etegaggagg
                                                                      300
aaggcccaat ggaggaggag gaggcccagc caatggcggc gccagagggg aaacggagcc
                                                                      360
ttgctaacgg gcccaacgct ggggagcagc caggccaggt ggcgggcgca gacttcgaga
                                                                      420
gcgaggacga gggcgaggaa tttgatgact gggaggacga ctacgactat cccgaagagg
                                                                      480
agcageteag tggtgeegge tacagagtat cageegetet tgaagaagee gacaagatgt
                                                                      540
ttctgagaac aagagaacca gccctggatg gcgggtttca gatgcattat gagaagaccc
                                                                      600
cgtttgatca gttagctttt atcgaagagc tttttttcac tgatggttgt caatcgtctg
                                                                      660
accgaagaac tcggctgtga tgagattatt gatagagagt agttagatgc tgttaaaaga
ggaggaaact acttgaggag ggacccaact ttccgctatc ttttgggttc attccaaata
                                                                      720
                                                                      780
gttttgtgcc attgaaaaac ttgaccttca aaaaaatttg tttttcagaa tagaacacaa
                                                                      840
taggacagtg actgcacagt tgtgaaaaag gaagagaatc attaaagaaa aagaaaaaag
attttaagac cgttgaaatc aattatcaag aacgtcctaa aacacctatg gctttgactt
                                                                      900
tgttattgat ccagattatt ttccttgcat tggggaaaat atctttcata tttgtttgct
                                                                      960
```

```
1020
gtaaaqatqq ttttgcaaqa ataagtcatg accaagacaa actgccaata caaaagccca
ctqatactaa ttatataatg agaaaaaaat gtatccaact aggacacata tcttttgagt
                                                                    1080
tatttggact gaaagcttaa gaaaacttgg aaaattctat tttgtgatct agtcaagcca
                                                                    1140
                                                                    1200
cagttatcaa aggctacatt ttcagtgtaa gataaatgga tgagtaaact caaatatgta
tcacgtgtgc tttgtatctt aagatgtgtt tccaagagca tctgaaattt tgtttgtaca
                                                                    1260
tgtatcttga tcatttataa agccactgtg atctataaat caagaaaatc cattgtcata
                                                                    1320
accattttta aaagtcaaaa attaagacat ccttaattaa aaagtttcaa atctagacac
                                                                    1380
taaatqtqtq tqaatqtaca aagaaaacaa accattgctt atgctgttat atactagaga
                                                                    1440
aattttgttt tgcttgctgt tttaacttga cagatgaagg actttagttg aacttcatat
                                                                    1500
                                                                    1560
tqtaaqaact gttaataaaa gttgtcaagt aaaaagcgct atatctaaaa agactttatg
aacaqttatt ctatcaactt ttaaaggttt taaacctgcc cagaaattac cttggtatct
                                                                    1620
                                                                    1680
gaagtttccc tctgtctcct cctctaatta agcttgttat ttgtcatgca ccagcattgg
agataataaa atttcttgtt ctgtgtattt tgtttggcta atagtattgc atacatactt
                                                                    1740
tctctqtata ctactttcta ttqtatqtqt taaccaqtat taagggaaaa tgatccagct
                                                                    1800
tragetatet aatteacaaa ttaatttetg gaaattaaae tttgtaaatt aagtttttge
                                                                    1860
ctataaqaat ttgctggtct gggaaaacct gccctatcaa tgagtatgtt gccgtggtta
                                                                    1920
                                                                    1980
cettactaag atgetgaagt tetaggagag taatgattac atcagaagge taggtteage
                                                                    2040
aaaataagtg tatcagcagg ttttatcatg atcagtaaaa atgttccaaa tgcttctgct
                                                                    2083
ccattatagc agtaaagaac gaatatccaa tgcaaaaaaa aaa
```

```
<210> 6070
<211> 766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (697)...(248)
<223> similar to gi5932428 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6070
tttttttttt ttaataaaac cataacaaat ctttcattaa agatctactg agaccttggc
                                                                       60
tgaaatcatc tattattgtt gctagttagc ctctcttcta tagttgggta atgtgtgtct
                                                                      120
                                                                      180
tgccactgtg tttgccagct ctcccaagtg aaaagaacac tttttataaa aaaattaatt
gctccaagtt ttcaggccca ggggaggctc tcccattctc ctccttcaat aagtcccgtc
                                                                      240
caggtaagag gtgatcttgt ggataaattc atcatacttc actttgccat tgggttcgat
                                                                      300
atotgoctto cotgaagaga toatcocact toottgtggg tgagottoto coccagacto
                                                                      360
                                                                      420
gtgagttttg accgcaggtc ggacgccatg acgtaacctt tcttctcctt gtccaccatc
aacatggcta gaagaatttc tttctttggg tcttcttgtt ttatttgcat gtgcataatg
                                                                      480
gtcagaaaag tggagaaatc cagctctcca tttccgtcta tcccgtgggt ctgcaggtgc
                                                                      540
egetgeacet eccetggegt egggetggee eccaggeace teatggeeac eatgaggteg
                                                                      600
gtggctttta tcttccccct ctgctgcttg tcatacaggg agaagcattc cttgtactca
                                                                      660
ttaatttggt cttgggaaag aaacttggcc attctggggc ctcagctgct acccgtgggc
                                                                      720
                                                                      766
ttgctgctcc cagaaccgcg ttcagttccc tttcctccct cgtgcc
```

```
<210> 6071
     <211> 412
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(413)
     \langle 223 \rangle n = a,t,c or g
    <220>
     <221> misc feature
     <222> (8)...(343)
     <223> similar to gi34201 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6071
ggcacgaget ggaaggetgt ggtcgaagge catttttttt tgctagttat aageggagtg
                                                                       60
ggtctccaga accaaaggga gctcattctt ctcaaaattg acggtgttta tgcccaagaa
                                                                      120
gaaactgaat tgtatttggg caagagatgc gcttatgtac acaaagcgag aacagcacac
                                                                      180
tgactcctgg cggcaaacca aacaaatcca gagttatctg gggaaggttc actccggcgc
                                                                      240
acggaaacag cggcatggtt catgccaaat tccgaagcaa tcttcctgct aaggccactg
                                                                      300
gacacagaat ccatgtgatg ctgtacctct caaagattta gaactaacga aagtaaataa
                                                                      360
ataaaaagtg atttgtcaaa tcgggcggnc gtggcggctc aacgctgtaa tg
                                                                      412
     <210> 6072
     <211> 3577
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (70)...(823)
     <223> similar to gi1212951 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6072
gctcggtaaa tatgtgttca ttaactgaga ttaaccttcc ctgagttttc tcacaccaag
                                                                       60
gtgaggacca tgtccctgtt tccatcactc cctctccttc tcctgagtat ggtggcagcg
                                                                      120
tettaeteag aaaetgtgae etgtgaggat geecaaaaga eetgeeetge agtgattgee
                                                                      180
tgtagetete caggeateaa eggetteeca ggeaaagatg ggegtgatgg caccaaggga
                                                                      240
gaaaaggggg aaccaggcca agggctcaga ggcttacagg gcccccctgg aaagttgggg
                                                                      300
cctccaggaa atccagggcc ttctgggtca ccaggaccaa agggccaaaa aggagaccct
                                                                      360
ggaaaaagtc cggatggtga tagtagcctg gctgcctcag aaagaaaagc tctgcaaaca
                                                                      420
gaaatggcac gtatcaaaaa gtggctgacc ttctctctgg gcaaacaagt tgggaacaag
                                                                      480
ttcttcctga ccaatggtga aataatgacc tttgaaaaag tgaaggcctt gtgtgtcaag
                                                                      540
ttccaggcct ctgtggccac ccccaggaat gctgcagaga atggagccat tcagaatctc
                                                                      600
```

	aagccttcct					660
	atagactgac					720
	aagattgtgt					780
	ccatctggcc					840
	tttttactgc					900
	catatccagt					960
	aaagcaataa					1020
	atatttttaa					1080
	aattaatctg					1140
	tatttttcca					1200
	agggctcccc					1260
	attaagaaaa					1320
	taaaccatgt					1380
	cacatacata					1440
	gaagccccgt					1500
	tgactgcaca					1560
	aatgttgtat					1620
	caaaagtttc					1680
	atccattcta					1740
	acccacgaac				_	1800
	tccaggagtg					1860
	cagttttcct					1920
	atgctctatg					1980
	tggatgtaaa					2040
	ttgaacactt					2100
	tcacattttt					2160
	tatttttaca					2220
	gacttgctcc					2280
	ttattcatat					2340
	atcccaaaat					2400
	ttgaaatcat					2460
	ctattcctgg					2520
	ctccactgaa					2580
	tttctgggct					2640
	aattattgta					2700
	ttccatataa					2760
	tgggaccaca					2820
	ctaatcaatg					2880
	tgttttgaga					2940
	taataatata					3000
	tttgtgtgta					3060
	tttgtagatt					3120
	cttgcttctt					3180
	aatacagaga					3240
	gtcaggccta					3300
	cagttacttt					3360
	atgaaaattg					3420
	ggatactata					3480
	gagataatgt			ccgattttta	aaaattaaat	3540
caaccitiget	ttgatggaat	addcccatt	Lagicac			3577

<210> 6073 <211> 2626

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (138)...(1318)
<223> similar to gi475210 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6073 gccgtgggat cccggatagg aggaggaggg gacccatagg acgcgttaac atggacctgg 60 aaaacaaagt gaagaagatg ggcttaggtc acgagcaagg atttggagcc ccttgtttaa 120 aatgcaaaga aaaatgtgaa ggattcgaac tgcacttctg qagaaaaata tgtcgtaact 180 gcaagtgtgg ccaagaagag catgatgtcc tcttgagcaa tgaagaggat cgaaaagtgg 240 gaaaactttt tgaagacacc aagtatacca ctctgattgc aaaactaaag tcagatggaa 300 ttcccatgta taaacgcaat gttatgatat tgacgaatcc agttgctgcc aagaagaatg 360 tctccatcaa tacagttacc tatgagtggg ctcctcctgt ccagaatcaa gcattggcca 420 ggcagtacat gcagatgcta cccaaggaaa agcagccagt agcaggctca gagggggcac 480 agtaccggaa gaagcagctg gcaaagcagc tccctgcaca tgaccaggac ccttcaaagt 540 gccatgagtt gtctcccaga gaggtgaagg agatggagca gtttgtgaag aaatataaga 600 gcgaagctct gggagtagga gatgtcaaac ttccctgtga gatggatgcc caaggcccca 660 aacaaatgaa cattcctgga ggggatagaa gcaccccagc agcagtgggg gccatggagg 720 acaaatctgc tgagcacaaa agaactcaat attcctgcta ttgctgcaaa ctgagtatga 780 aagaaggtga cccagccatc tatgccgaaa gggctggcta tgataaactg tggcacccag 840 cttgttttgt ctgcagcacc tgccatgaac tcctggttga catgatttat ttttggaaga 900 atgagaaget atactgtgge agacattact gtgacagega qaaaccccga tgtgctgget 960 gtgacgagct gatattcagc aatgagtata cccaggcaga aaaccagaat tggcacctga 1020 aacacttctg ctgctttgac tgtgatagca ttctagctgg ggagatatac gtgatggtca 1080 atgacaagcc cgtgtgcaag ccctgctatg tgaagaatca cgctgtggtg tgtcaaggat 1140 gccacaatgc catcgaccca gaagtgcagc gcgtgaccta taacaatttc agctggcatg 1200 catccacaga gtgctttctg tgctcttgct gcagcaaatg cctcattggg cagaagttca 1260 tgccagtaga agggatggtt ttctgttcag tggaatgtaa gaagaggatg tcttaggagg 1320 agggcaccca gaagtatcga gccatagcta tccaaagtgg tctgcatttc tactgtaaaa 1380 tgcaatttga aaaaataaa acgcaaaaaa agaaactgta aaggaaacca agagattttg 1440 tttaattttt ttggccattt tttcttcatc aatttttttt cggtctcaac ttttaaactt 1500 ggtttaagca tttgatttgt aaaacagtaa ataattgtat ctttccatag cttttcaaat 1560 gtgaaatcat ttttggaagc ttggatctca ttaaacttca tgtctctatt ccatttgggc 1620 cacacactta aaagttagtg tactgaatgg aaagatgagc attcctagtt ctacacttct 1680 tttttccccc tcatgtgtaa aatgaaaaga aaactaaatt tgccctaata ccaaggcgct 1740 acgtttattg cctcgtctta ttcactgacc tttgtaatga tacacagtga attcttttg 1800 acaaagagaa atgcagtgta gtatgcagag ctgctgtttt aatgcctatg catttactct 1860 ttcctgattt aggcagaggt ggcattttct ttattgcatt tctctatttt tttaatgtac 1920 cctaccttca gtattctctt tgtaagttgg tgacttgcat ctgtggcctt gaatatttta 1980 ttatcacatg tggcataaca gtatccacac tttttagttc tttattttt tttttattt 2040 tggagcaatt ctcctgcctc agcctcccca aatagctggg ataacaggtg catgccacca 2100 cacccagcta atttttgtat ttttagtaga gacaggtttt caccatgtta gccaggctgg 2160 teteaaaete etgaeeteag atgateegee tgeettggee teecaaagtg etgggattae 2220 aggtgtggga gccaccatgc ctgacccaca cactttttac ttgtatagat gatttttggc 2280 ttggacataa aagccaagcc acccatttgc ttttaatcca aagaacatgt atagtttttg 2340 tacccagaga ctatgattta tattgattgc acttgcctgc catgatttag ataagatttt 2400 ttttgcatgg tttttattct ttcctaatgg atcctgtttt ataatacttc caagcctgtc 2460 catggatata tcaaatgtct tcacttgtat attttcatgg ctaggtattt ctaatgttta 2520 ttcttccctg tgtacttcta cacatagcta tgcactatga aaattaaatg gaatgaatga 2580 tatgtatatt actcaaaata aagtttcttt cactttaaaa aaaaaa 2626

```
<210> 6074
<211> 6375
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6376)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (6209)...(3271)
<223> similar to gi3043658 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6074

ttttttttt ttgaaaatta agaaaacctt ttttatatat tttaccaagg aaaataacaa 60 aatgttttga caagtaccac gatgtgaaaa aaagcaccgg ttgaccatgg agtacaactg 120 tgaaatgcaa ggcatgtgaa attcaagcat tcagagaaaa gccacactga gagcttgtta 180 gaccatgaat ctggttatac tatggggtca aataatgacc ctaggtatac aggtttctct 240 ttccctcgtt aaaacagaaa aaaatttaaa agatgctctc caataataga attataatgt 300 gatttaaata ttttttaatt actcatctac acaaatgacc tttgatcaag ctcaggcaaa 360 atataagttg caataatatc tacacgtaat gtgaaggttt taaaaaaata atacaaagtt 420 cattcacagt gcacaagtga aaaccaaggt aagtttcaaa tatctcaaca acatatagcc 480 540 atgatcattc aaaaggtaag gcatatttta aaggcacatt tccatactgc tagggctata 600 acataggacc agcttagaga actgagagaa aaaccattac ttttggaaat tcccncccnc cccccctct tttattggaa agcaaaaata ccagatttct ttcctcagat acatacatct 660 agaataaata aatacaaaat tattaactaa agattttatc ttttaaacct atactctqac 720 teteatecta tggteaaatt cecacattgt gaggetggga ageaceacte tetgeeatgg 780 ttccctactt atttttatat cattcatttg catttggagg ctgaataatt tgcagaaaga 840 agtctgcgga aaaaactgta gaaaatggga atacaaagag ggcaatatca taaactacta 900 gaaaggttga ctgttccacc cgcaactata gcacagtggg ttaaacgggg aagctgcaag 960 ggccgcttat ttcgtgctgt gcactgccta ggtacactga tttttaaaat tgaagtccta 1020 gccaaattaa gtttggatat catctattta cagttgttca gtcttccata cagagctttg 1080 tecactecae tetttgeaaa ttetgacata aaaacaaatg attetgtgge tagttegaat 1140 ttaacttctg tatatttagt atctttttgt ttaaattaga atcatttctg acttttgaac 1200 tacagacaca agacacaggg tttactcctg aagacctgaa attttaattt tcctttccaa 1260 taaacatctg ccagttggat aaatacccta gctttccaag gaaaaataaa gcatgcttag 1320 gatgagatca gcctaaaaag aagaaaaaa aaaccccatg aaagaagccc acattactgt 1380 ggggcattgg agagggcagt caggactctc atgtgggact tttagtaata ttaattgtta 1440 tcatctattc acatacgtta caatactgat ctcctcaaag aaatgaagat ctccctccat 1500 ctctttttaa aacttataca aagggatgtg ataacagtag tgactaatat tagccttttc 1560 cttgggagaa atctgtggaa atacagctga aggtctttct ttctatagtt gacagaagta 1620 aataaatatg gtcctgtttt attctttaga aatagatgtg tagttgtaat tgttatgctt 1680 tacaactgca aaaatattca ttaacatgca ttaacctgta agcactggtt agaggggtgt 1740 acccagtaag gtcatctcct aatctgtgta tagaacataa tagagctctc ctccctttct 1800 atteactect greectagae ctaaaagaaa taaaaaaagt teetgaetat geatetacea 1860 gcgcatctgt gctgcttaag gctggaccta cttttcttat caaacagtat aaaacaaaca 1920

```
1980
tacattgaat teetggttte ggaagtattt ttteatatee teaacegage ataccaagtg
                                                                     2040
ttacatcttg agggatcaca acgaagcatg cattgatgta aaacaataaa atggggagta
                                                                     2100
gcaatggggc tgttaccaaa aagcaactcc aagaaaataa gatttagcaa actgtaaaat
caaaaacatc acacaatgga cacttttatt aacaaagtaa aggcttagtg aaaaggcagc
                                                                     2160
aaatgagata gacattttaa gtaaagaaag catttctttg cttgaatgtc ctttagccaa
                                                                     2220
                                                                     2280
ttaaaaaata tttatttaaa acacatgaaa atgttgtgaa ggtagtattg taattaaatt
                                                                     2340
qcaataaatt qaactaaatt tttctttatt cagctgccag ggggatggtc aacattactt
                                                                     2400
taattgttga aataatttct atttaaaata gtcttatgaa agaaagcctt tttctgatac
                                                                     2460
ctagttgaaa tgtttgataa tattctaaat gaaattagtc aattgattat ccttaatctt
                                                                     2520
cctcatcctg tgtcataatc cggtggctct gtcaacagga gaaaaaccac tattaacaga
                                                                     2580
aagcctaacg taagtataca acatctaaaa taaatcaatt tcaaatggat atagagagtg
                                                                     2640
agaaaacagc aactgaatca aataggtaag ctggtactga cttggcttcc aaggcaaatt
tettegetgg ctatgaaggg ttgaaattte ttteactgaa cgttacaate caaattaace
                                                                     2700
tgttttaggg gttcttctgt tacccatttt tctttcatgt ggtgaatata aactgaatta
                                                                     2760
tcatggtcaa atagtttctg ggaatagaat actacagaca catacaatga tttagcaggc
                                                                     2820
                                                                     2880
tactgtgatt ttatatacaa ttgataactt taaacaattg ctatataagt tttatttcaa
                                                                     2940
aacacctagc attgtatttc tggaaaagaa actgaacatt gagcaacctc agttaatcca
                                                                     3000
ttaaacgagt gccaccacaa ataagacaac aaacagagaa caagtttctt atcttcaagg
actgaaccta atggccatac caattatatt attccgattt gtcactttag tacaacaaaa
                                                                     3060
taggatgtta atccattacc actgttcttc cattcgagag gcagctgatg gttaaagcgc
                                                                     3120
ccgtaacata catcgattat ttttatccca tgactttatt gtatgtttag aaaggtggaa
                                                                     3180
                                                                     3240
cagcagaaga aaaagaggct ggacaaaaga cgttgatgtt tttgttcttc agatgtatgc
agagetgatt atgagtacga ttttaattta ttteteetga tgaagagett caatgaaage
                                                                     3300
atcaagtttt tottgaattt ototaacttt ottgaggtot toogcoagtt gaacgogttt
                                                                     3360
accagtaagc aatttaatct tetteteace atetteagca aaatetteea atacetettt
                                                                     3420
aacatttttc tctaatcgcc taacttcagt atttgtaagt tgttgcctta aagtatttgc
                                                                     3480
ggtgatagca agcatgcgct gtatacgcca aaacaagacc acatcattgc attccaactc
                                                                     3540
agaatctaca aaatgccttt ggtagtaata aaaacctctt cgacaaaggt tacaatggtt
                                                                     3600
tagagetgtt tttaaaaaat gtettetata aaettgatge caagtateet taatcaaget
                                                                     3660
tggatctact tctactcctc gggattcaag gttcttccgg actgtggtta tttcatcact
                                                                     3720
tgcaagataa gctgggtgct cctcattaca tttcaacatc ttctccaatt cattcttggt
                                                                     3780
ttcattgtga acacactgtt cttgggtccg attcttccag gtataaccac ctctttttcc
                                                                     3840
aggtctggac ccaccatgtt ttcaattgca ttttcagtat ccttgagacg agcctgcaga
                                                                     3900
gcctcttcca taaaataaat agctgcatcc cattgctgtt tatcagatat ggatcggtct
                                                                     3960
tccaaagcat tgtgttgaat aaccctcaag ctgtcctccg caaagtcatt ccacttgtgt
                                                                     4020
cqtttaatac tttcttcctt aacqqcctct ttaaqtttat caaatatqtc atcatqctct
                                                                     4080
ttccctttcg gttctgtcat aaagcgggaa aattcttctt gtagggtctc ccaagcaacc
                                                                     4140
tctactgctt tattaggaag ttgtttatca gtccactgtt taagcttgat atccactgtg
                                                                     4200
gtgttaaaag ttcctgaatt catggtctgc gcagctggaa ggtagatgtt ttcaatcaca
                                                                     4260
                                                                     4320
tgagttgata ctctttccca caaagattgt tgaaggattt cctcccaatg ttttggtgta
acctggctca gactgataac ttcatcaagg atttcatttt tagctttttc aaatagttca
                                                                     4380
ttccggtcaa gttcccgcag gcgaggatag ttattcttcc attcagtttc aaggttaaaa
                                                                     4440
cgtgttgctt tgaaactatc agcctgttgt tcaacagact ctcgtaccat tttccaaaag
                                                                     4500
cagtetgata etgeaagget taaatttett gtagteactt ggtgtgeett tageatgett
                                                                     4560
gtetttagga getttgaatt etgaaaaaac tettetteat attetettat agetteaatg
                                                                     4620
ctttcagagc tgttcccttt tcctgttaca acagcaaaat aacctaaagc tttcattggg
                                                                     4680
aagagettte etteaattat etgetgaate etgettggae tggetacatt tttetetgee
                                                                     4740
aggtetaett tggteaaaac gaatatggtt eteetteeat gagggteeat ttgaetgaee
                                                                     4800
aagtotgtaa caatactgog ttoagcatoo acagatocat ottgaataca cagtatgatg
                                                                     4860
gcattaggat cctgcatgta agctttgctg atactgaaaa tagtttcctt tgtgtcagga
                                                                     4920
gccatgcctg atgtcacagt attaatcaca cctggtaagt caacaagcac catcctctgt
                                                                     4980
agtccagggc cttttacatt taaggatatg gtctcagggc taacggtaca gccttctttc
                                                                     5040
acatttttcc tcattcgaag ttctatttca tgtcttaatg ctgcaagatc ttcttctttg
                                                                     5100
gtaagatcaa actcccgaga actatcttta aatagggcca catggtgagg accttcactc
                                                                     5160
agagtcacct taactggaga acgtgtcatc atctccccag atcctcttgg gaatattcga
                                                                     5220
gettgggeaa teattteeaa eacaetagte ttteeageae tetgatetee aaceaeaaea
                                                                     5280
acccgtggca gatgatcttg cgtattataa ctggcatcat aatcagagag aacatcaaga
                                                                     5340
```

```
acttcagaat acatgtcaat caaagatttc cttaagcttt ctatgaatgg aatgcctttg
                                                                     5400
tcatctttct gcaatactaa ttttctcaat tctttgttct ccttttctaa tcgttccaag
                                                                     5460
attototgat acttoaactg agtgtgoaga agttottoot gaagttggto aattttotot
                                                                     5520
ttgtctgaca cctttctaaa atgcttgtca ctttcagatc cacgatctgt tgctctaaac
                                                                     5580
geegtttett eeggagaace tgaggtaaaa aagteettea ataagetaag gettteaaca
                                                                     5640
atcttgtcaa agtctggtgc taactttaca aggtcttctg aactaggaag ggcttttcta
                                                                     5700
attttctcaa aatcgatata ctcatcaatt tcccacacaa tgtcaggcac aatccattta
                                                                     5760
tattcactaa ggtccggtat catatctttc cactgatcaa aagtcttttt ggctgtgtag
                                                                     5820
ccaccccaa cagccgatcc tagtatgaga tagcgaagtt ttaagagtct cgtagctaat
                                                                     5880
cttgctggcc aaaaattcct gcgaggctgg tagccatatt taattggaga gaatttcagt
                                                                     5940
ttacgtaaag gaaggtttgt cagagaagag aactgctgaa aggatgtcct taattggggt
                                                                     6000
cgttgaagct ttaaggtagg atgatgtgaa tgataaatgc ttcgtgaaac cagatgtagt
                                                                     6060
ttttgtagtg gtaaacttcc ttttattcca gagetgtgtt tcactaaaga etggeagace
                                                                     6120
teacaggeca cageggeeeg aegtagtege caeateeege eggeggggag gteacgeagg
                                                                     6180
egecgagaeg gecaegeggg eageceeegt gtgageeeca geeeggetee eggteeagga
                                                                     6240
atgacccagg aagtggccct cagcagcaag ggcacagagc cgcggccgaq acqaaatcqt
                                                                     6300
cgacccggga attccagann nnngctette gaaagaente agtntcgang gnatcagtee
                                                                     6360
cgctnnggtc cgact
                                                                     6375
```

```
<210> 6075
<211> 1891
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (178)...(1397)
<223> similar to gi5231137 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6075 tgcaggaatt cggcacgagg ctgagcggat cctcacacga ctgtgatccg attctttcca 60 geggettetg caaccaageg ggtettaece ceggteetee gegteteeag teetegeace 120 tggaacccca acgtccccga gagtccccga atccccgctc ccaggctacc taagaggatg 180 ageggtgete egacggeegg ggeageeetg atgetetgeg eegeeacege egtgetaetg 240 agegeteagg geggaecegt geagteeaag tegeegeget ttgegteetg ggaegagatg 300 aatgteetgg egeaeggaet eetgeagete ggeeagggge tgegegaaea egeggagege 360 accegeagte agetgagege getggagegg egeetgageg egtgegggte egeetgteag 420 ggaaccgagg ggtccaccga cctcccgtta gcccctgaga gccgggtgga ccctgaggtc 480 cttcacagcc tgcagacaca actcaaggct cagaacagca ggatccagca actcttccac 540 aaggtggccc agcagcagcg gcacctggag aagcagcacc tgcgaattca gcatctgcaa 600 agccagtttg gcctcctgga ccacaagcac ctagaccatg aggtggccaa gcctgcccga 660 agaaagaggc tgcccgagat ggcccagcca gttgacccgg ctcacaatgt cagccgcctg 720 caccggctgc ccagggattg ccaggagctg ttccaggttg gggagaggca gagtggacta 780 tttgaaatcc agcctcaggg gtctccgcca tttttggtga actgcaagat gacctcagat 840 ggaggctgga cagtaattca gaggcgccac gatggctcag tggacttcaa ccggccctgg 900 gaagcctaca aggcggggtt tggggatccc cacggcgagt tctggctggg tctggagaag 960 gtgcatagca tcacggggga ccgcaacagc cgcctggccg tgcagctgcg ggactgggat 1020 ggcaacgccg agttgctgca gttctccgtg cacctgggtg gcgaggacac ggcctatagc 1080 etgeagetea etgeaeeegt ggeeggeeag etgggegeea eeaeegteee aeeeagegge 1140

```
1200
ctctccgtac ccttctccac ttgggaccag gatcacgacc tccgcaggga caagaactgc
                                                                    1260
gccaagagcc tetetggagg etggtggttt ggcacetgca gccattecaa ceteaacgge
cagtacttcc gctccatccc acagcagcgg cagaagctta agaagggaat cttctggaag
                                                                    1320
acctggcggg gccgctacta cccgctgcag gccaccacca tgttgatcca gcccatggca
                                                                    1380
gcagaggcag cctcctagcg tcctggctgg gcctggtccc aggcccacga aagacggtga
                                                                    1440
ctettggete tgecegagga tgtggeegtt ceetgeetgg geaggggete caaggagggg
                                                                    1500
ccatctggaa acttgtggac agagaagaag accacgactg gagaagcccc ctttctgagt
                                                                    1560
gcaggggggc tgcatgcgtt gcctcctgag atcgaggctg caggatatgc tcagactcta
                                                                    1620
                                                                    1680
gaggcgtgga ccaaggggca tggagcttca ctccttgctg gccagggagt tggggactca
gagggaccac ttggggccag ccagactggc ctcaatggcg gactcagtca cattgactga
                                                                    1740
cggggaccag ggcttgtgtg ggtcgagagc gccctcatgg tgctggtgct gttgtgta
                                                                    1800
ggtcccctgg ggacacaagc aggcgccaat ggtatctggg cggagctcac agagttcttg
                                                                    1860
gaataaaagc aacctcagaa caaaaaaaaa a
                                                                    1891
```

```
<210> 6076
<211> 4323
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (186)...(3371)
<223> similar to gi4200325 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6076 caatctagtt tcaacataca atgaggattt ctgtctgata cagagaaaga tacccagtgt 60 ctggagggtc tgtcttaaga agtgctcttg aagtctgctg ggatttcctt tcgggactca 120 cagagggaag cctgctccct gagggctttt tctcaggccc aatagatcag ggtaatcatt 180 accaaatgag gaggaaagga cgatgtcatc gaggctctgc agcgaggcat ccttcttccc 240 catgcagtgt taaacactcc cctacgcgag aaacgctgac ctacgctcaa gctcaaagga 300 tggtagagat agaaattgaa gggcgcttgc acaggatcag tatttttgat cccctggaga 360 tcatattgga agatgacctc actgctcaag agatgagtga gtgcaacagc aacaaggaaa 420 acagegageg geeteetgte tgettaagaa etaagegtea caaaaacaae agagteaaaa 480 agaaaaacga ggccctcccc agcgcccacg gcacgccggc ctcggccagt gccctcccgg 540 agcccaaggt gcgcatcgtg gagtacagcc ctccgtccgc ccccaggagg cctcctgtgt 600 actacaagtt catcgagaag tcggccgagg aactggacaa cgaggtggag tatgacatgg 660 acgaggagga ctatgcctgg ctggagatcg tcaatgagaa gcgcaagggc gactgcgtcc 720 ccgccgtgtc gcagagcatg tttgagttcc tgatggaccg ctttgagaag gagtcgcact 780 gcgagaacca gaagcagggc gagcagcagt ctctgatcga cgaggacgcc gtgtgctgca 840 tetgeatgga eggggagtgt eagaacagea aegtgateet ettetgegae atgtgeaace 900 tggccgtgca ccaggagtgc tacggggtgc cctacatccc cgagggccag tggctctgcc 960 cgcccactgc ctgcagtcgc gggcccggcc cgccgactgt gtgctgtgcc ccaacaaggg 1020 tggtgccttc aaaaagacag atgacgaccg ctggggtcac gtgggtgtgt gccctgtggg 1080 atcccagagg gtcggctttg ccaacacggt gttcatcgag cccatcgatg gggtgaggaa 1140 catccctcca gcccggtgga aactgacatg gtaacctctg taaggagaag gggcgttggg 1200 tgcctgcatc cagtgccaca aagcaaactg ctacacagca ttccatgtga cgtgtgccca 1260 gaaggetgge etgtacatga aaatggagee egtgaaggaa etgaetggeg gtggeaceae 1320 cttctccgtc agaaagaccg cttactgtga tgtccacacg cctccaggct gcacccggag 1380 gcctctgaat atttacgggg atgtcgaaat gaaaaatggc gtctgtcgaa aagagagctc 1440

		catccaaggt				1500
		tcctgccgac				1560
gttaaatagg	attgcgaatc	aggtggccat	tcagcggaag	aagcagtttg	tggagcgagc	1620
		agcggctgtc				1680
		agcgaagctc				1740
ggctgccaaa	gagaagctga	agtactggca	gcggctgcgg	cacgacctgg	agcgcgctcg	1800
cctgctgatc	gagetgetge	gcaagcggga	gaagctcaag	cgtgagcagg	tgaaggtgga	1860
gcaggtcgcc	atggagctgc	ggctgacccc	gctgacggtg	ctgctgcgct	cagtgctgga	1920
ccagctgcaa	gacaaggacc	ccgccaggat	atttgcgcag	cccgtgagtc	tgaaggaggt	1980
accagattat	ttggatcaca	ttaaacatcc	catggacttt	gccacaatga	ggaaacggtt	2040
agaagctcaa	gggtataaaa	acctccatga	gtttgaggag	gattttgatc	tcattataga	2100
taactgcatg	aagtacaatg	ccagggacac	cgtgttctat	agagccgcgg	tgaggctgcg	2160
cgatcaggga	ggtgttgttc	tgaggcaggc	ccggcgcgag	gtggacagca	tcggcttgga	2220
agaggcctcg	gggatgcacc	tgcctgagcg	gcctgctgcg	gcaccgcggc	ggcctttctc	2280
		tgctggaccc				2340
		acatgctcga				2400
		tgctcaaaaa				2460
		tgcccacggg				2520
		cgggcgagga				2580
		gcacatgcgg				2640
		tcaccaacgg				2700
		aggccacacc				2760
		tctgcgactc				2820
		ggcacacgct				2880
		aggcggccag				2940
gtggatctcc	actgatgccg	ccgcctcggt	gctggagcct	ctgaaggtgg	tgtgggccaa	3000
		acccggcact				3060
		ccatcccggc				3120
		atgagaagct				3180
		agtccaaaat				3240
		ggaggaattc				3300
		tgagccgcgt				3360
		gccagcgcgg				3420
		cttaacttat				3480
ttttccccgg	ggaggggga	ggttttattt	ccaaqttttc	taggaaccca	tctccatcta	3540
		cacgtccggg				3600
		ttctttgata				3660
ttaataattt	tgtaaatcat	gctctttaca	cagagtacca	cttatttaat	aagacgggat	3720
		gtgtatttta				3780
		ataaagttat				3840
		cgccggtggg				3900
		tcccagcgga				3960
		tgcaaaggta				4020
		agcagaatgc				4080
tgtactttga	ttttataact	tgtaatcttt	totttacaat	gaggggttt	ctgtaacttg	4140
ttttaattta	gaacactttq	gtagcaatag	aaactttgga	tacattttta	tatogtacct	4200
gtgatgtata	tagaattagt	actttattt	tatttttaag	aggtaaagga	ttatgttggg	4260
gaaagtaggg	tgggtttcca	aatttgcatt	ttttatatta	aaaataaagt	caagatttgg	4320
aaa	300	, , , , , , , , ,				4323
						~ ~ ~ ~ ~ ~

<210> 6077

<211> 1164

<212> DNA

```
<220>
     <221> misc feature
     <222> (1146)...(373)
     <223> similar to gil374879 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6077
tttttttcca agtgtttcat accttttatt acaaaaatca ataacttaat tcagttctgt
                                                                       60
ataaagtega taggaettet ggteeaataa geageetaag ettteattet eateeeaaqa
                                                                      120
agggacagga gtcttggccc agaggctcgt ggggaccacc aaaagccttc ccaggcagct
                                                                      180
ggagcactgt gtccaaacca aggaagtcca atgtggggtg tggctgagtg aagagctgtt
                                                                      240
cctaaggagc caagtgctgt ctatacaggc ttgcccctc caggagcatt gggtcacctc
                                                                      300
tggggatggc caggetgaat cagcactgcc agectetgcc cacetgatet etgeetggge
                                                                      360
tggaacaggt cacctgagca aaagcatgtc cccaagaagg ccagcgatgt caacatctcc
                                                                      420
aatgataggg cgaaagaaga ggtccccaag caggctggtc ggaatggact tgagggtgga
                                                                      480
ggccgtgagg aggacacggg tcaggcggcc ttgggctgct gggcaccagg gttccaggac
                                                                      540
ttcacacage acceagtgag cetectgetg caggtgeeca atgtgggagg eggettggag
                                                                      600
gcctggcaca tcggggttga agagaatggg tcctttcagg caggcattat tccttggggc
                                                                      660
taagctccag gctccagaag gactccagac agcattgaag ccactgcacc gcagccaggg
                                                                      720
agggctgggg tctgtctggc agttggccac tgcctccact gctgctgggc tcctccagca
                                                                      780
gaatettett gagtatgetg ggeaeegggg ceteageeae eteaaaqqte acaqeatett
                                                                      840
gggccaaccc aagcaggaag agggggccc agcaaccctg caqcaqccqc cqctqqtcct
                                                                      900
ggggaggcag ctgccagaag gatggcaggt tcctgaggaa ggccactgtc ttggccagaa
                                                                      960
catccaagge ctcccggcag gtgcgatgag gtgcacatag ctggacggge cggtgctgcc
                                                                     1020
tacataggca geggetaegg ggteggggga cageettgag getggagete agaaqtqeqt
                                                                     1080
agagaatggc ggggcggctt gcagctccct ggcatgggca ggcccctggt tggctggtgc
                                                                     1140
tcatggttag ggatctgctc tctc
                                                                     1164
     <210> 6078
     <211> 5175
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (5175)...(2789)
     <223> similar to gi2997619 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6078
ttttttttt ttcacttcaa gttttatttt gcctcttgca tggtctttta cagttcgttt
                                                                       60
tctacaggaa ctgagctctg atccaaacaa tcaataaaaa tgtaattcca accttaatat
                                                                      120
tcataaccag gaaatagcat agcacttcat gatcctagag tgatgaaagc aagaccaggg
                                                                      180
catctgtttc acagtcacct gtgaccagac cagccaacat gattactaaa agccaagata
                                                                      240
aaaccaaaag caaacttgct aaaaaatcct gaattccatg aggttaactc tgaaatcctc
                                                                      300
```

<213> Homo sapiens

```
360
caaacaaaat gctagaattg tccactagtg ttaagacgag aaaactgagg aaaactcagc
                                                                      420
tgtcttacta tctggtaaga gtcttccctt catctcaagc cctcaaaaat gcaaacttgg
                                                                      480
ttccagcttt acaacatacc atatccttct atcggttaaa ggtttctaac ctaaaaacct
                                                                      540
teteteettt etteteacet atttagtgea taeteaaagg etttggttgg aagteactag
                                                                      600
gtaccactag gtacaatgct ttagggctct ctcaaagccc acaatggtgg agttctgtga
                                                                      660
aagaaaactt aagtttettt etetttaeee eteteeeete aeteagetea aagttaaaca
                                                                      720
gctgatgcaa aactacagag aagcaagata acaaaatact gttatcaatc tatggagaaa
tcagccagcc atgatgaaaa aatgagtcct gccgactatc tgccagcttc atgctcagaa
                                                                      780
cccttaaaaa cacagaatct aaattaaaat acatgaagct ttcacaatcc ggttaaagga
                                                                      840
aaaaggtaac tgtaaataac tggttaaagt gtgctcattc gttcagaaat tagatacaaa
                                                                      900
                                                                      960
catgcaagaa ttaaagactc tgatttaata aaatcagtag taacaggtct tgagattaaa
caactgacct gagggcaaat gggaccaatc agtccctgaa ccctacctga catgtcaaat
                                                                     1020
ccaacatttc acatgctgac ctaatattga ggttaatttc cagaagtaac tgcacttttc
                                                                     1080
aacagattaa gtcctacaaa attaggctct cgtaccccaa atggtcatgg cctacgccta
                                                                     1140
ggtgggaggc actttaaaaa taataaaact tcaaaaagaa caaaacaac cccaaaccca
                                                                     1200
aagacaaaag taaagaaaat ccacttttca ctggtttaca ttattcaaag tgccattctg
                                                                     1260
aaccaacacc ctttcattta tagaggaaaa aaatttacaa aaacagtaaa cacaaaqgat
                                                                     1320
agtcaggtta cagctagttt atatacaaag aaatttacaa gtttgtcaat tgtaggcttt
                                                                     1380
tgccacaaac aaatgcacat ttgtccctac aaagtacaac atgcctgaac caacagtcat
                                                                     1440
tacaggagac aattggccac gggctttaca aaaagcagga ataacctgcc ccaaattgaa
                                                                     1500
attatttatt cagettaaac taatgecaca accateccac ttggaatcac tecacectga
                                                                     1560
cacttetgaa acceaetett tetttettte atetetgeea tgteecetaa gaetgagagg
                                                                     1620
catttcactc aataaaccaa ggaagatgac agatgttatc ttgattactc tcaggtggag
                                                                     1680
aaacggcaac ccacactgga tgcagaaaat agtgctggac tacatttatt ggaagactct
                                                                     1740
ctccctgtat aagcccatgt aaaaggtctc agcacctaac acaagactca aaaaggaagc
                                                                     1800
ccacatctct ctttcataca ggatttgctg caatactata ttctttccca ccagtgagta
                                                                     1860
gtctcaaagt gtgatgggtg agtatttaca tagtcttctt tgtttcgaat ccaattggct
                                                                     1920
gatttgttac cattctagag gctgaactgt atgaagacct caactaccat tcacaaggtg
                                                                     1980
cagttaagag acttttggac agttcacagt gtccaaacaa atgtcaacag gctccgacca
                                                                     2040
agtataacca catcetttgg aaatcettce atttttgcaa tttcaaaaca tectaacttg
                                                                     2100
ctgtaaaatt ccagaattct tttatcatct ggtctcactt cacagaaagc tccccgggag
                                                                     2160
ccattagcct tcagtgaaga caggaggcaa gccatcatgc ttttggccac acttgggtca
                                                                     2220
gttacttttt tgtgaatgtc catctttatc agagaaggga aattagcaag gaaagtttct
                                                                     2280
ggcagtactt cctgttcttc atggaaactc aacattattt tctcagcctc agagagttcc
                                                                     2340
ttgtcaccat ttggcttggt atacttctcc tgcatgaagg ggatccagga aattttacat
                                                                     2400
tttttaataa agggggtcac atctacagtg cccaaggcat aaccacatat gccatcttca
                                                                     2460
tettetagga caaagcagta atccaggetg agggaaagca geeeteetac taacttgtet
                                                                     2520
ccaataagat caggetgact ttgaaagggt aaacccactc categtcata catttctctg
                                                                     2580
caaatcttgt acacggatgc ctcatcctta ggaaaataag gtctgatagt ataaactttg
                                                                     2640
gaggtaggag tcagtggagg tggctgaaaa aagagatcat ttgccccatc aattggcagc
                                                                     2700
aaacgetgga acteteetge tagaceacet etaaaggeee agggttettg gteteeaatt
                                                                     2760
aagaattgtg ctgaagaatg actacgacac cctaaccact gtacaaaaga cttcaccata
                                                                     2820
gacattatac tettgatate ecaaacatag gagtacatgt cataaagaat tgteetgttg
                                                                     2880
gcacaattgg agagccgagt gaacattccc atcactagtc cacacatctc ttcaaacttq
                                                                     2940
gctgctcgtg accgccattc ttcaattttt tcagagtctt ttcctttgca attgacactg
                                                                     3000
acaacactac tatttgctcg aagccattga aattcccgta acatctgtgc tcctttgggt
                                                                     3060
ccatgctcgt aaggaaggta gaatagatca gcaagtaact gcaaatcctc cagggtcact
                                                                     3120
ggttccgcag tgtacaaagg cttttcattt ggacctggca caaactgctc cttgtttgtc
                                                                     3180
tgttcatcag tttgcatggg ggcaatgtca ctaatacaat cttcttgcat ggacatctct
                                                                     3240
ggggattttg attcagctat gctctcttta tcagtgtcca ttggtttcaa ttcctctgcc
                                                                     3300
attttcgctt caacaatttc actcagtatt tggattgtca ttcttgtggt ccgtttcttc
                                                                     3360
ttgtttttcc accaccatgt ccatgggttc ttcatcaggc tgtttcttt cttcttcctt
                                                                     3420
ggtcagagta gtaggctcac cactcaaggc tgctcctgg ctcataatgg gctcctgata
                                                                     3480
aactgttgtt actacggttg tggcatttaa agagggtgct gcaactaaag gagtcccatc
                                                                     3540
aactacactt gctttagctc cactgtgtgc aacttgccta ctgctgtatt gatgaggcac
                                                                     3600
accaaactct tgcaaccatt ctgttaatgc tagctttaga gccatctgtg gactatagag
                                                                     3660
tacatcagtt tcaatatctt catcactgcc ttcattttct aattttatct ggatggacac
                                                                     3720
```

```
agtactatct tcactgtcag tcatcactac atcttttctc actccattca tgtttgattt
                                                               3780
gtaccaggtg gcaagggtgt ggatagcaac gtagttggct tcaaattcac aatttggatt
                                                               3840
agtgaggact ccttttaacc gtgggatgag ttctgtggat cttcctttgt acgggcccag
                                                               3900
                                                               3960
aaacagtete ttetgateat aateattage atgaatgtta teecagatta etggagetet
cttaataatc ttagaaacct cttcgatgga ctctactgga atttctttag aaacaacttt
                                                               4020
gggacctgtc caaagcactt caattccagg tagaagcttt tcacccacag tccttaaata
                                                               4080
tggagactga gacacatttg gataacagaa agtgccacag tattctgtgg gacagaagag
                                                               4140
gaaaqtttct ggctctccta ggtactgata gatttcattt gtgatggaga cttgggcatg
                                                               4200
agcaaaagaa ctgaatacct ctttgtctgc tgcacacata ttatggtcta tatcatcaaa
                                                               4260
aagcaaagca aatgatetge acceaaactg agaaacetgg tecaatttae gttteaatgt
                                                               4320
4380
ctctatctca tattctcgtg cagcagagat gagagtcata agttgctcag cttcctccac
                                                               4440
                                                               4500
tgaatacatc tctcgccaaa acatcctatg tttgtagtca tcttttgggg catacaagta
tgtatttaat tcccatttct ggagccttct aaagagttct tttctctgtt ccataaccca
                                                               4560
aggtetteca taaaateett eeaceacace geagaggaac egeegageee eteetgeage
                                                               4620
cccggccacc gccgctccct cagccccggc ggggttgtct tctccaggtg ccggagctgc
                                                               4680
4740
ctcctccaac gtcgcttgac tctccttctg caccatcctc ctgcccccgg ccgctgccac
                                                               4800
ctctgcgggt cctcctcgac ctctgtccgt tggggcaccg gcccggagcc ctggagaggg
                                                               4860
cttcagetce aagtgtgege ceetcegget cettcecete ceeetctgee ettceceete
                                                               4920
ceteteegea gggaceegaa tgeeeggatg agaagggegg eggcacegge gegageeett
                                                               4980
tgtcagccgc agcctcggct ttaagctggg gcgccagaag cctaagcgga gagcgaggct
                                                               5040
gtgacctete gttecetgga agaagaegge caagggteet gteetegtte tetgeetetg
                                                               5100
etgeecteec gataatetta ggtetteege tgttteeect ecaageeceg ageteteeet
                                                               5160
ctgctgctgc ctcca
                                                               5175
```

```
<210> 6079
<211> 6584
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6585)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (272)...(5450)
<223> similar to gi1663706 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6079

cagtgaagga tgaagaatga ttagactcta aggattatgt gtaataatcc gggagacata 60

gatgtgccat ctcatgaatt aaattgttca cttctttcag agacttgtgt tactattgga 120

gaaaagaaaa atgaagcttt gatggaatgt aaagccaagc ctgttggtag tccaattgtt 180

taagttttca gataaagaag aacatgaaca aaatgattcc atttcaggta aaacgggtga 240

gactggtgtt gaagaaatga tagcaacaag aaaagttgaa caagattcaa aggagacagt 300

aaaattatcc catgaagatg accatattct tgaggacgct ggatcttctg atatttctag 360

tgatgctgct tgtacaaatc caaataagac agaaaacagc cttgtaggtt tgcctagttg
```

```
480
tgtagatgaa gtgactgaat gtaatttgga attgaaggat accatgggta ttgctgataa
                                                                      540
aactgagaac acccttgaaa gaaataaaat tgaaccgttg ggttattgtg aagatgcgga
                                                                      600
gtctaatagg cagttggaga gcactgagtt taataaatca aacttagagg tggttgatac
                                                                      660
tagtactttt ggaccggaaa gtaatatctt ggaaaatgct atttgtgatg tgcctgacca
                                                                      720
aaattcaaaa caqttqaatq ctatagaaaq tactaaaata qaqtcccatq aaacagcaaa
                                                                      780
cettcaggat gacagaaaca gecagtcaag tagegtttet taettagagt caaaaagtgt
aaaatccaaa catacaaaac ctgtaattca ttctaagcaa aacatgacca cagatgctcc
                                                                      840
gaagaaaatt gttgcagcaa agtatgaagt aatacatagc aaaactaaag ttaatgtcaa
                                                                      900
aagtgtgaaa cgaaatactg atgtaccaga atctcagcaa aattttcata ggccagtcaa
                                                                      960
                                                                     1020
agtcagaaaa aaacaaattg ataaggagcc aaagattcag agttgcaatt ctggggttaa
atctgtgaaa aaccaagctc attctgtact gaaaaaaaca ttacaggatc aaactttagt
                                                                     1080
acaaattttc aagcccttaa ctcattcttt gagtgataag tcacacgctc atcctggttg
                                                                     1140
cttgaaagaa cctcatcatc ctgcacaaac tggacatgta tcacattcta gccagaaaca
                                                                     1200
gtgtcataag cctcagcaac aggccccagc aatgaaaacc aatagtcacg tgaaggaaga
                                                                     1260
gcttgaacac ccaggcgttg agcattttaa ggaagaggat aaactgaaac tgaaaaaacc
                                                                     1320
tgagaagaac ctacaacccc gccaaagaag aagcagcaaa agtttttctt tagatgagcc
                                                                     1380
accattgttc attccagata acatagctac cataagaaga gaaggctctg atcatagctc
                                                                     1440
ctcatttgaa agcaaatata tgtggactcc cagcaagcag tgtgggtttt gcaaaaaacc
                                                                     1500
acatggcaac aggtttatgg ttggctgtgg gagatgtgat gactggtttc atggtgattg
                                                                     1560
tgttgggtta agtctttctc aagcacagca gatgggcgag gaagacaaag aatatgtctg
                                                                     1620
tgtaaaatgt tgtgctgaag aagacaaaaa gactgaaata ctagatccag atactttgga
                                                                     1680
aaaccaagct acagttgaat tccatagtgg agataaaaca atggagtgtg aaaagcttgg
                                                                     1740
attatcaaaa cacacaacaa atgatagaac caaatatata gatgatacag tgaagcacaa
                                                                     1800
ggtcaaaatt ttaaaacggg agtctggtga aggcagaaat tcatcagact gtagagataa
                                                                     1860
tgaaattaaa aaatggcagc tagctcctct tcgtaagatg ggacaaccag ttttacctcg
                                                                     1920
gagateetea gaagaaaaaa gtgaaaaaat accgaaagag tetacaactg ttacttgcac
                                                                     1980
aggagaaaaa gcttcaaaac caggtactca tgagaagcaa gagatgaaaa agaagaaagt
                                                                     2040
tgcaaaaagg agtgcttaat gtacatcctg ctgcttctgc ttccaagcct tctgcagatc
                                                                     2100
agatcaggca aagtgtcaga cattctctca aagacattct tatgaagaga cttacagact
                                                                     2160
caaatttgaa ggtaccagag gaaaaggcag caaaagttgc cacaaaaatt gagaaagagc
                                                                     2220
ttttctcttt ttttcgggac acagatgcta aatataagaa caaatataga agtttgatgt
                                                                     2280
ttaatttgaa agatcctaaa aacaatatat tatttaaaaa agtactgaaa ggagaagtaa
                                                                     2340
ctcctgatca tcttatcaga atgagtccag aagaactagc ttctaaagag ttagctqctt
                                                                     2400
ggagacgaag agaaaacaga cataccatag aaatgattga gaaagagcag agagaagtgg
                                                                     2460
aacgacggcc aatcaccaaa ataactcata aaggtgaaat agaaattgag agtgatgccc
                                                                     2520
caatgaaaga acaggaagca gccatggaga ttcaggaacc agccgccaat aagtcattgg
                                                                     2580
agaagccaga aggatctgaa aaatcgaaaa gaggaggttg actctatgtc taaagatacc
                                                                     2640
actagtcaac acagacagca tetttttgat etcaactgca aaatetgcat aggtegaatg
                                                                     2700
gcaccacctg tagatgatct ttctccaaaa aaagtaaaag ttgttgtagg agtagctcgc
                                                                     2760
aaacattcag acaatgaagc agaaagtata gcagatgcat tatcttcaac ctcaaatatt
                                                                     2820
ttggcttctg aattetttga ggaggagaaa caggagtete caaagteaac gtteteteet
                                                                     2880
gctccacgtc cagagatgcc tggaactgtt gaagttgagt ctacctttct ggctcgattg
                                                                     2940
aacttcatct ggaaaggttt tatcaacatg ccttctgtgg caaaatttgt taccaaagcc
                                                                     3000
tatccagtat ctggctcccc agaatacctg acagaggacc taccagatag tattcaagta
                                                                     3060
ggtggcagga tatcacctca gacagtttgg gattatgtgg aaaaaataaa agcatcagga
                                                                     3120
accaaggaaa tttgtgtggt tcgcttcaca ccagtaactg aagaagatca aatttcttat
                                                                     3180
actttgctct ttgcatactt cagtagcaga aagcgctatg gagtagctgc taacaacatg
                                                                     3240
aagcaggtta aagatatgta ccttattcct ttgggtgcca cagataaaat tccacacct
                                                                     3300
cttgtgcctt ttgatggacc tgggcttgaa ctgcatagac ctaatctatt qttgqqctta
                                                                     3360
attattcgtc agaaactgaa gcgacagcac agtgcctgtg ctagtactag tcatatagct
                                                                     3420
gagactectg aaagtgcacc accaatagca ttgccacctg ataaaaaaag taaaatagaa
                                                                     3480
gtttctacag aagaagcacc agaggaagaa aatgactttt ttaattcttt tacaactgta
                                                                     3540
ttacacaagc agagaaataa acctcagcag aatcttcagg aagaccttcc aacagcagtt
                                                                     3600
gaacctttaa tggaagtcac caaacaggag ccaccaaaac ctttaagatt tcttcctggc
                                                                     3660
gtgttgattg gctgggagaa tcaacctact actctggaat tagcaaataa acctcttcct
                                                                     3720
gtggatgata tacttcaaag ccttttgggc accactggtc aagtatatga ccagggccca
                                                                     3780
gtcagtgatg gaacaaaaca ctgttaaaga aattccattt ttaaatgagc agaccaactc
                                                                     3840
```

```
3900
aaaaatagag aaaacagata atgtggaagt aactgatggt gaaaacaagg agataaaagt
                                                                     3960
taaagtagat aatatttcag aatctacaga taagtcagca gaaatagaaa catcagtagt
agggtcctct tccatttctg cagggtcttt gacgagtctt agtctcagag gtaagccacc
                                                                     4020
                                                                     4080
agatgtttct acagaagcat ttttaacaaa tttatcaatt cagtcaaaac aagaggaaac
tgtggagagt aaagagaaaa cattaaaaag acagcttcag gaagatcaag agaataattt
                                                                     4140
gcaagataac cagacttcaa atagttctcc atgcagatct aatgtaggaa aaggaaacat
                                                                     4200
agatggtaat gtgagctgta gtgaaaacct tgttgctaat acagcgaggt ctccacagtt
                                                                     4260
tatcaacctg aaaagggatc ctaggcaagc agcaggacga agtcagcctg taactacttc
                                                                     4320
agaaagcaaa gatggagata gttgccggaa tggagaaaaa cacatgctgc ctggcctgtc
                                                                     4380
acacaacaag gagcacttaa cagaacaaat caatgtagag gaaaagttgt gttctgcaga
                                                                     4440
gaaaaactcg tgtgttcagc agagtgacaa tttaaaaagtt gcacaaaact caccatcagt
                                                                     4500
agaaaacata cagacttctc aagcagaaca agcaaaaccc ttacaggagg atattttaat
                                                                     4560
gcaaaatatt gaaactgtgc acccatttcg aagaggatca gcagtagcga catctcattt
                                                                     4620
tgaagttgga aacacatgtc catcagaatt tccttctaaa agcatcacct ttacttccag
                                                                     4680
aagcaccage cecagaacaa gtacaaactt ttcacccatg aggccacage agcccaacct
                                                                     4740
teageatete aagtetagee eacetggatt teeattteea gggeeteeta atttteeeee
                                                                     4800
acaaagcatg tttggatttc caccacattt gccacctcca ttacttcccc ctccaqqctt
                                                                     4860
tgggctttgc ttcaaaatcc catggttccc tggccacctg ttgtttcatc tcccaaggtc
                                                                     4920
agecacageg tatgatgggt ceteteteac aageateaag gtatatagge eegcagaatt
                                                                     4980
tttaccaggt taaagacatt cggaggccag aaaggcgcca tagtgaccct tggggtaggc
                                                                     5040
aagaccaaca gcaactggat aggccattta ataggggtaa aggggaccgc cagagatttt
                                                                     5100
atagtgattc acaccatttg aaaagagagc gacatgaaaa ggaatgggag caagaatctg
                                                                     5160
aaaggcatag acgcagagac agaagccaag acaaggacag agacagaaaa agcagggagg
                                                                     5220
aagggcacaa agataaagag agggcacggt tatcacatgg tgatcgagga acagatggaa
                                                                     5280
aagcaagcag agatagtagg aatgtagaca agaagccaga taaacctaaa agtgaagact
                                                                     5340
atgagaagga caaagaacga gagaaaagta aacacagaga aggagaaaag gacagggata
                                                                     5400
ggtaccacaa agatagggac cacactgaca gaactaaaag caaaaggtaa aatttgcagg
                                                                     5460
ctgcttcagg attacattta aataactgtt aaaatgttgt atcttgtaaa caaaagaaag
                                                                     5520
attgcctgct aggattgtgc catctttaaa atttttacta ttggtcattt gcagaacagt
                                                                     5580
aaattetgtg tgttggtaca gagtgetetg taccagtget catcateeet tetteatace
                                                                     5640
aacggtccct agttatagga atttaatatt tttaaaagtt ttacattgct qtatattcaa
                                                                     5700
agatttgttt tattaatatg caataaaggc ttagaaattt tagttttatt ccttaattgg
                                                                     5760
taaatatggt taactatgga atatatttac ttcctctaqt qaatqtcctt tatataatqa
                                                                     5820
ctaatttggg agtaatgtgt gctctgtaag tttgttttaa attgcactgt ttttaaagaa
                                                                     5880
actgtagagg agcaacaaaa atccaagcaa cttcataatc agattatgct aatcatttag
                                                                     5940
ttgagcagtt tttgaccaag aatcagaagc ccaaggggta catttattgc tttaatctgc
                                                                     6000
actcattgaa gtcatttatt accatatact acagctttgt ggtaggccat tattttcatt
                                                                     6060
ttcatttttg gctcttcaga aacttgaata cttaagcttg tacatgatct tgtgttttgc
                                                                     6120
tatccttttt actgtaaaat gtaaatattt taagggatat tttgattcta aatatgataa
                                                                     6180
aataatttct cacctatttt gtgtgtgtga cttgaaattc agtagtaaaa gaatttcttc
                                                                     6240
tttaaagctt taattacctt cagacattga ttttttgtta ctcagccaag aacatataga
                                                                     6300
aatagctatc tatgtcaggc attagatgag gggaaaaaca attttttaa aatcttaaat
                                                                     6360
tgtaggctga gatgaattgt gtagttctaa agaggctaga atttagaact acctqtqaaa
                                                                     6420
cactgtgcag ctatagccca ctttataggt aagtttctgg aaaactttta caccatcgca
                                                                     6480
atttgggtac tctgacttca cttaatcatt taaaatttaa aggacccgca ggaactttga
                                                                     6540
gggggaanta tgtttttgga atccntttta ttaaaatgtg ccgg
                                                                     6584
```

```
<210> 6080
```

<211> 6421

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (36)...(5664)
<223> similar to gill36430 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6080 acaacttgag accattatcc tttgcattgt ttttaggaga cccaaacatg gcaaacctgg 60 aagaaagett eeceegagga ggtacaagaa agateeacaa accagagaaa gettteeage 120 agtcagttga acaagacaac ttatttgata tttctactga agagggatcc accaaaagaa 180 aaaagagcca gaaggggcca gcaaaaacaa aaaagttgaa aatcqaaaaq aqaqaaagca 240 gcaagtccgc aagagagaag tttgaaatcc ttagtgttga gtccctgtgt gagggaatgc 300 gtattttggg ttgcgtgaaa gaggtgaatg aactggaact ggtgattagt ctccccaatg 360 geeteeaggg etttgtgeaa gteaetgaaa tetgtgatge etacaccaaa aagetgaatg 420 agcaggtgac acaagaacaa cctctgaagg acctacttca cttgcctqaa cttttctcac 480 ctggaatgct ggtaagatgt gtggtgagca gtctgggcat cacagacagg ggcaagaaga 540 gtgtcaagct gtctctgaac cccaaaaatg tcaacagagt gctgagtgct gaggccctga 600 agectggeat getaettaca ggtaeegtat eeageetgga agaeeatgge taeetagtgg 660 acattggtgt tgatgggacc agagetttte tgecactget gaaageecag gagtacatea 720 gacagaagaa caaaggtgct aaactaaagg tgggtcagta cctgaactgc attgttgaaa 780 aggtgaaagg caacggagga gttgttagtc tgtctgttgg tcactcagag gtttctacgg 840 ccattgctac tgaacagcag agctggaacc ttaataactt gctaccagga ctggtggtca 900 aageteaggt acagaaggtg actecatttg geettaeget aaaetteete acattettea 960 cgggcgtggt tgactttatg cacctggatc ccaagaaagc tggaacatat ttctcaaatc 1020 aggeagtgag ggeetgeate etttgegtee atcetegaae cagagttgtg cacetgagee 1080 tgcgccccat cttcctacag cctggacgcc cactcacccg actctcttqc cagaaccttq 1140 gagcagtgct ggatgatgtt cctgtccagg gttttttcaa aaaqqctqqq qccaccttta 1200 ggctgaagga tggggttctg gcctatgccc ggctcagcca tctctctgat tctaagaacg 1260 tetteaatee tgaggeette aageeaggga acaeteacaa gtgtagaatt attgaetaca 1320 gccaaatgga tgaactggcc ttgctctctc tacgaacgtc tattattgaa gctcaqtacc 1380 ttagatatca tgacatcgaa cctggggcag tggtaaaggg cacagtgcta accataaagt 1440 catatgggat gctggtgaag gtgggcgagc agatgagggg cctggtacct cccatgcacc 1500 tggctgacat cctgatgaag aatccggaga agaagtacca catcggggat gaggtcaagt 1560 gccgggtttt gctttgtgac cctgaagcca agaagctgat gatgaccctg aaaaaaaccc 1620 tgattgagtc caaactacct gtcattacct gctatgccga tgccaagcct ggtctgcaga 1680 cacatggctt catcatcagg gtcaaggact atggctgcat tgtgaagttc tacaacaatg 1740 tgcagggact ggtgcccaag catgagctca gtactgagta tatccctgac ccggagagag 1800 ttttttacac tggccaggtg gtgaaggttg tcgtattgaa ctgtgagcca tccaaagaga 1860 ggatgetett ateetteaag etgtegagtg ateeagagee aaagaaagag eetgeaggae 1920 acagtcagaa gaaaggaaaa gccattaaca ttgggcagtt ggtagatgtg aaggttttag 1980 agaagaccaa agatgggctg gaggtggctg tcctgcccca caacatccgt gctttcctcc 2040 ccacatctca tetgteggac caegttgcca aeggeecatt gttacatcat tggeteeagg 2100 caggtgacat cetteacega gteetgtgte tgagecagag egaggggegt gttettettt 2160 gcaggaagcc agccttggtc tccacagtag aaggtggcca ggatcccaag aacttctcag 2220 aaatccatcc tggaatgctg ctcattggtt ttgtgaagag catcaaggac tatggcgtgt 2280 tcatccagct cccctcaggt cttagcggac tggccccaaa agctatcatg agtqacaaat 2340 ttgtgacctc cacaagtgac cactttgttg agggccagac agtagcggca aaggtgacca 2400 atgtggatga ggagaagcag cggatgctgc tgtcactgcg gctgtcggac tgtggtctgg 2460 gggacttggc tatcaccagc ctcctcctcc tgaatcagtg cctggaggag ctgcagggcg 2520 tgcgcagcct tatgagcaac cgagactctg tgttgatcca gacgctggcc gagatgaccc 2580 caggaatgtt cettgaceta gtggtgcagg aggtgttgga agatggetet gtggtattca 2640 2700 aggtggaatc tgggcagaaa aagaaggttg ttatcttaaa tgttgatctt ttgaagttgg 2760 aagtgcacgt ttcccttcac cagggacttg gtggaataga aaagctagaa agctqaqqaa 2820 aggcagcgaa caccaggcga ttgtgcagca cttggagaag tcctttgcca ttgcctcctt 2880

```
ggtagagacg ggccacctgg cagctttctc cctgacctct cacctcaacg acaccttccg
                                                                    2940
ctttgactca gagaaattgc aggtgggaca gggtgtctcc ctaaccctca agaccacaga
                                                                    3000
accaggagtg actggccttc ttttggctgt ggaggggccg gctgccaaga ggaccatgag
                                                                    3060
                                                                    3120
gccgacccag aaggactctg agacagttga tgaggatgaa gaagtggatc cagctctgac
tgtagggacc ataaagaagc acaccctctc catcggggac atggtcacag ggactgtcaa
                                                                    3180
gtccattaag cctacccatg tggttgtgac tctggaagat ggcattattg gctgtatcca
                                                                    3240
tgcctcccac attctagatg atgttccaga gggcacctct cctactacca agctgaaggt
                                                                    3300
tgggaagacg gtcactgccc gagtgattgg cgggcgagac atgaagacat tcaagtatct
                                                                    3360
cccaataagt caccccagat tcgttcgaac catcccggag ctgagtgttc ggccaagtga
                                                                    3420
gctggaggat ggccacactg ctcttaacac tcactctgtt agccccatgg agaagattaa
                                                                    3480
acagtaccag gccggccaga ctgttacttg cttcttaaag aaatacaatg tggtgaagaa
                                                                    3540
atggcttgag gtggagattg ccccagacat ccgggggaga attcccttat tgctcacttc
                                                                    3600
tetgagette aaggttetga ageateeaga taagaagtte egggttggee aggeeetgag
                                                                    3660
ggccaccgtt gttggcccag attcctccaa gaccttctta tgtctgtccc tcacaggtcc
                                                                    3720
tcacaagctt gaggaagggg aagtggccat gggccgagtg gtgaaggtga ctcccaacga
                                                                    3780
ggggetgace gteteettee cetttgggaa gataggaaca gteagtatat tteacatgag
                                                                    3840
tgactectae teegagaege eeetggaaga ettegteeee eagaaggttg teagatgtta
                                                                    3900
catcctgtcc actgcagaca acgtattgac tttgtcgctg cgatcatcca gaacaaaccc
                                                                    3960
ggagacgaaa agcaaagtag aagatccaga gattaactcc atccaggaca ttaaggaagg
                                                                    4020
gcagcttctg aggggctatg tagggtccat ccagccacac ggtgtgttct ttcgccttgg
                                                                    4080
eccetecgtt gtgggtttgg eteggtaete ceatgtetee cageacagee egtecaagaa
                                                                    4140
agecetttat aacaaacace teeetgaagg gaagetgete acagecaggg teetaegeet
                                                                    4200
taaccaccag aagaacctgg tagagctgtc tttcctcccc ggagacactg ggaagccaga
                                                                    4260
4320
tgaggagaga gaccaaaaag gggaaaagaa aaatcagaaa aggaacgaga agaagaacca
                                                                    4380
gaaggggcag gaggaggtgg agatgcccag caaggagaag caacagcccc agaagccaca
                                                                    4440
ggcgcagaag cggggcgggc gggagtgccg ggagtctggg agtgagcagg aaagagtgag
                                                                    4500
caagaagcca aagaaagccg gcctgtcaga ggaggacgac agccttgtgg acgtgtacta
                                                                    4560
tegggagga aaagaggagg cagaagagac gaatgtgetg cecaaggaga agcaaaccaa
                                                                    4620
gccagcagaa gcgccccggc tgcagctgtc ttcaggcttc gcttggaatg tgggactaga
                                                                    4680
ctctctgacc ccggccttgc cacctctagc agagagctca gacagcgagg aggatgagaa
                                                                    4740
gccacaccaa gccacgataa agaaaagcaa gaaagaaagg gagttggaga agcagaaggc
                                                                    4800
agagaaggaa ctgtcccgca ctgaggaggc gctgatggat cctgggcggc agccagagtc
                                                                    4860
cgcggatgat tttgaccgac tggtgctgag ctcccccaac agctccattc tgtggctgca
                                                                    4920
gtacatggct ttccacctgc aggccacgga gatcgagaag gcccgtgccg tggctgagag
                                                                    4980
ggcccttaag accatctcct tcagagagga gcaggagaag ctgaacgtgt gggtggctct
                                                                    5040
gctgaacctg gagaacatgt acggctctca ggagtccctg accaaggtct ttgagcgagc
                                                                    5100
egtgeagtae aacgageete teaaagtett tetecacetg getgacatet acgeeaagte
                                                                    5160
agagaaatte caggaagetg gtgaacteta caaceggatg etgaagegtt teeggeagga
                                                                    5220
gaaagctgtg tggatcaaat acggcgcctt ccttctgcgg aggagccagg ctgcagccag
                                                                    5280
teacegegtg etgeagegag ecetggagtg cetgeetage aaggageatg tggatgteat
                                                                    5340
tgccaagttt gcccagcttg agtttcagct gggggatgca gagcgggcca aagccatttt
                                                                    5400
tgagaacacg ctgagcacct acccaaagcg cacagatgtc tggtcggtct atatcgacat
                                                                    5460
gaccatcaag cacggcagcc agaaggacgt ccgggacatc tttgagcggg tcattcatct
                                                                    5520
gagcttggcc cccaagagaa tgaagttctt cttcaagcgc tacctggact acgagaagca
                                                                    5580
gcatggcact gagaaggatg tgcaggcagt caaggccaag gccctggagt atgtggaggc
                                                                    5640
caagagetea gtgetagagg actagtggea ggetggetet gtgggacaet gteaacaatg
                                                                    5700
ggccagcccg gccccgcctc gagtgcctgg gcactcggaa aactgttacc tcaggactct
                                                                    5760
atttaaatgc tgctttttct gcagcacgct tggggaaatc ctgtcaggat gaaaaggaag
                                                                    5820
ttgagatttt ttaaatccct cttcgcttgc tttattttca gtaccaactt gttatctttt
                                                                    5880
tecttatetg aggetacetg gggattgtgg geageaggee eetggaetee eagaaatget
                                                                    5940
gagggtccct cttccagggg agttccctgg ggagcaagag tagaggggct attcccgagg
                                                                    6000
gtcctgtggt cagggtcctg ctttgtccct ggcaggctgt cagtccagct ggaggggtc
                                                                    6060
agtaggetee agggagtggg ceeteeete egatettgga gtetetgggt gtteetteag
                                                                    6120
cctcagcctc actggtacct ctctgccctt taggggaggc tatgaagtct tggaaaggag
                                                                    6180
gacaaaatca gagcccagag ggggaaatgg agaaacctgg gctgctgagg aaagccacgg
                                                                    6240
gtgttggcgt gaactgatga tgtctcatcc cacgcccact atggccacat tacctaacct
                                                                    6300
```

```
ctccatatct gggctattca aggtcttgga ggccagcaca gacccagcta gttgttgaag 6360 ccagttcttt tttgtcttgg tcatgaggga attaaacgtt ttctctggca gaaaaaaaaa 6420 a
```

```
<210> 6081
<211> 1114
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (914)...(248)
<223> similar to gil669621 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6081 tttttttttt ttgaggctga aattgaagct ttttattttg gatatacata ccactattac 60 tgttttaaag acatttttat gtagtgatac tttgtattat ggactctata aagttctata 120 ctgtaatcaa gacatttata taaagtgaca ctttgggatt atttggcctc ataagctaga 180 tgccagtgaa attggcatac acatcaatag acatgtttac acttccagtg ttagggtttt 240 tgtttattcc agttgtactt cctttggcag acggctatta tgttttactt tagtgccgta 300 ttgtggatgc cagagaactt gcatttgcca gggaataatc tcctgagatg ctatattatg 360 aagtagaatg gtgtagtcta attcaataaa gtcatcattt ctttgcactt gcttgacagt 420 ttgaattttt accattttat accatgtgtc ttcagtagaa ttttgccata ttatataacc 480 acaggcaacc caggctaaat gtagaacgag cgtcatttct ggagatacat ttccaaaatt 540 gtctgcgaat attttgtgct tctagcggtt ccttcatgga cttaagtctt tgataaaatg 600 tgttgtcttc ttcatctgga ttctttccag tttctccttc aaatgtgaag ttgacttctg 660 gtgcagtttc ttgtcccgtt gaagggtaaa gtacttcagc tgtgcagttc accttaactt 720 gtttttgtat aatttettea acagcaaatt taaggegata ettatgteet etteetggaa 780 tatcctccat gctggcttgt ttgaccttct gcacctcaaa caccctgtgc ggggtcccct 840 gctggtagtt gatgtagttc tgtgccacca aggccgccct ggaggctggg tagttggtcg 900 gegggattte catteeggat gageagtgae tteagggett gggetaetet ggettaaegg 960 gaccagtage agagegeege cegteetget tgetgetggg teeggttgee gaggeggaaa 1020 agtogoaage teetteagte tgtettette etcageteet teegacteeg gaagetgetg 1080 tttgggccca ggctccctgc atccgagagc cctg 1114

```
<210> 6082
<211> 3364
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3215)...(639)
<223> similar to gi30508 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6082 60 gaattcccac cacatgaaca cttaattaac tggagataat gttaaagcaa ggtctctaca 120 attitccatt aggitgiget teaaatagic tataataagg actigaatta attacattit 180 attgcactat aaattggctg ttgtcattat acccaaatgt aacaaataag gcagacttta 240 atttctctgt agacctcctt ggatagaaga taagtaattt aaaaatatgt aaaaattgaa 300 aaatttqtqt acttgtttat agtgtctctc tgtaaatgtg catttgacca aagagattcc 360 atccaaataa tgagagaaaa accccccaa atagcatctt ctgctttaaa aaattcttgg 420 tttqtaattt ttttttaaaa gtcataaagc cactggcttt cagagactta ttagaacaca ctcatctctt catggcatgc ttctggctaa gtgtcctaaa tttggggctc caaattaatc 480 540 caaaaattcc agcccatctt cttcttgtcg gttcactgca acaacctaca gacccagcca 600 ccqatcctct tccttcatag ttatatgtca ggacatagtc ttgggcatgc ttgtgatttt 660 catcttgatt acacagatac actttctttc attgtttaat ttttaatcag agtgtgtcct 720 ctaatggatt cttcaccaag acggggctga gtaaaactgt gccactccga gtaagtgtat 780 ctgcagttgt ccacctccgt gtgtcctccc ctgcaggagt ccagggtgtg atggtggcca 840 gececegge aggatteega ggtetggtgt ceteetttea ceatttegat ggteteetga cctccgtttt tgattcctga tcccacggtg ccacaaactc cctgagcaga agcgcccaca 900 960 gtttgggttg tgaagccatt cgcagaatac actttgtcat ctccaggagc ttctgtgttt 1020 gatacaatta ggttctgctg ggctaaatca tcaggaatta cttttggttg tttagacgtc 1080 ccagaagccc cacagaccag cgtaaacagg atgcaaaaga acaatgctat gcccaacaat 1140 attgcaagga tggcccactt tccaagttgt actcctccac cgccaatcct tggatctaca 1200 cgatgtgtgc agtcattttc ggtaatgcag tcacacagtg taacatccaa tgaagtgaca ctagacatgc caagtctatc tctcactgtt ataggtacta catatgagcc aaatggagga 1260 1320 tcattctgat aggaaagacg tgctgctgta tcattaattg ctttcagtct ccacattctc 1380 tgtacttctg aagtagaact ctccagacta aagtcaaagg gtgggccatg gataggctca 1440 tcaggatcaa ccgcaacaat ctccgcagat gacatggtgg gtttgcagat gatcactgtc 1500 tttttaggta tgaatgggct gttatcattc acgtcttgaa gtataatgcc cagtgtcccc 1560 gtacatgttc tecetecttg gtetgatgca aggactgtaa tattatatat gecatttttg atggtctctg cctctctatc caggcttctg aaaactttga ttgatcctgt attttcatca 1620 atggtgacce accetgttgg atcagttaat ttettatace ttatgccact getacttett 1680 1740 gtttctgggt catatgcttt atatccattg cttgttgttc ccacttctgc attttctttc 1800 atgcgaacag tctgtattgg agggttacac tcagggccct catcctgatc ttctacatta 1860 acagtaactg ttgctgtgct catggctgat cttggactag cctctctgga aaatggagct 1920 tcattaacta caccaatttg caagatcatc tgttgctttt cttcataatt caaaggctta 1980 actacacaaa gaactccttc attggttttg gcatctgtta caattttaaa attgccattt 2040 tcattgccct ttaaaatggt ataattagct ctccagttag cagtattcac taagtcctta 2100 tcctcaacag taactcgtaa gatttccaca tcaactgtat tttcttccac tgatgtcaca 2160 taaqaaqtac gagtaaatgt tggcaagtgg tcatttacat catcaatgtt aatgatacaa gttgaagttg tctgtagacc aaaatactga ccatccatgt cttgtacttt tattttcaac 2220 tggtacttgt caattaactc tctgtctagc tgagatgatg ttgtggtgat cacgcctgta 2280 gttggatgca tagaaaatag ggtgggtgat ggtggcacct gcccaatgat ggagtacttc 2340 aggegtgtgt geategtgte aggeteatet ttgteagtag eacacacttg teccacagta 2400 gtgcccactc tgcaattttc aaaaattgta aaagtataag tttcttctgt aaaaattggg 2460 tagttatcat tttcatcctc tattttgatt attaggggca gtggaagttc tggagtatac 2520 ccatctggag ttgttgcaaa ggcaattatc tcaaaagatt catactgctc acgatctaca 2580 ggacgagtac aatacaagtt tccagtgtct ctctccacat aaaataaatt ccgaggttct 2640 2700 tggtcaactc caggacctct tatggaatag tatatggtat agttttgggc cgtgtcagat 2760 tgaacctgtt gaaggaaaag tggaaaagga cccaaggagt tttctagcat cgaacaagga 2820 2880 aggacettig titgatgete caaaaagaca aatatittet tetittetig giteteagig 2940 ttggaaagta atatggtaaa acttetette teegaggaca atagaatagt atttgttgta 3000 tagactgaac catcctccaa aatttggaag tcaggatcac ttgaatgaat tagatttgca 3060 gctgtaaagc actctttcag gttaactcta ccaacaagtt tctcggcatc tagtttggag ggaacatgta atgtcacatt tttgcaggca tcactggcaa atattaagaa cgcgaagggt 3120

```
caccaggaag cagccggcag agggctccgt tccaggagcc ggaggggcgg gctgcctcca 3180 tggagagggc tcggggcagg tcgcgggccg agcgtcgggc cgggggttag gagggctccg 3240 cggaggaggt gggcgcgcg ggagcgcagt ctgggcccgc tgctcaggag gagcgcagg 3300 cggaggaggt ggggcgcgc gagaggtgct tttcttagct tctctgaagc gcctgcctct 3360 catc 3364
```

```
<210> 6083
<211> 3494
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (84)...(2346)
<223> similar to gi520934 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6083 60 eggtgetgee geegttgeeg ggageegegg agacaagtea ttaegtttte attteteaca 120 actgggctga gcacaactga accatggggg aacacagtcc agacaacaac atcatctact ttgaggcaga ggaagatgag ctgacccccg atgataaaat gctcaggttt gtggataaaa 180 acggactggt gccttcctca tctggaactg tttatgatag gaccactgtt cttattgagc 240 aggaccetgg cactttggag gatgaagatg acgacggaca gtgcggagaa cacttgcctt 300 ttctagtagg gggtgaagag ggctttcacc tgatagatca tgaagcaatg tcccagggtt 360 atgtgcagca cattatctca ccagatcaga ttcatttgac aataaaccct ggttccacac 420 ccatgccaag aaatattgaa ggtgcaaccc tcactctgca gtcggaatgt ccggaaacaa 480 aacgtaaaga agtaaagcgg taccaatgta cctttgaggg ctgtccccgc acctacagca 540 600 cagcaggcaa cctgcgaacc caccagaaga ctcaccgagg agagtacacc tttgtctgta 660 atcaggaggg ctgtggcaaa gccttcctta cctctcacag cctcaggatc cacgtgcgag tgcacacgaa ggagaagcca tttgagtgtg acgtgcaggg ctgtgagaag gcattcaaca 720 cactgtacag gctgaaagca catcagaggc ttcacacagg gaaaacgttt aactgtgaat 780 ctgaaggctg cagcaaatac ttcaccacac tcagtgatct gaggaagcac attcgaactc 840 atacagggga aaagccattt cggtgcgatc acgatggctg tggaaaagca tttgcagcaa 900 gccaccacct taaaactcac gttcgtacac atactggtga aagacccttc ttctgcccca 960 gtaatggctg tgagaaaaca ttcagcactc aatacagtct caaaagtcac atgaaaggtc 1020 atgataacaa aggacactca tacaatgcac ttccacaaca caatggatca gaggatacaa 1080 atcactcact ttgtctaagt gacttgagcc ttctgtccac agattctgaa ttgcgagaaa 1140 attccagtac gacccagggc caggacctca gcacaatttc accagcaatc atctttgaat 1200 caatgttcca gaattcagat gatacggcaa ttcaggaaga tcctcaacag acagcttcct 1260 tgactgaaag ttttaatggt gatgcagagt cagtcagtga tgttccgcca tccacaggaa 1320 atteageate tttatetett ceaettgtae tgeaacetgg ceteteegag ceaeceeage 1380 ctctactace tgcctcaget ccgtctgctc ctccgcctgc tccctcccta ggacctggct 1440 cccagcaagc tgcatttggc aaccccctg ctctcttaca acctccagaa gtgcctgttc 1500 cccacagcac acagtttgct gctaatcatc aagagtttct tccgcacccc caggcaccgc 1560 agcccattgt accaggactt tetgttgttg etggggette tgeateagea geggeagtgg 1620 catcagetgt ggcagcacca gececaccac aaagtactac tgageceetg ecagecatgg 1680 tccagactct gcccctgggt gccaactctg tcctaactaa taatcccaca ataaccatca 1740 ccccaactcc caacacagct atcctgcagt ccagcctagt catgggagaa cagaacttac 1800 aatggatatt aaatggtgcc accagttctc cacaaaacca agaacaaatt cagcaagcat 1860 ctaaagttga gaaggtgttt tttaccactg cagtaccagt agccagtagc ccagggagct 1920

```
ctgtccagca gattggcctc agtgttcctg tgatcatcat caaacaagaa gaggcatgtc
                                                                     1980
agtgtcagtg tgcatgccgg gactctgcaa aggagcgggc atccagcagg agaaagggct
                                                                     2040
getectecce accecteca gageegagee eccaggetee tgatgggeee ageetgeage
                                                                    2100
teccagegea gaetttetet teageeeetg gtteeegggt cateateete tacettgeee
                                                                     2160
                                                                     2220
tectectgtg ageaaageeg acaageagag acteetteag acceteagae agaaacatta
                                                                     2280
agtgccatgg atgtgtcaga gtttctatcc ctccagagcc tggacacccc gtccaatctg
atteceattg aageactact geaggggag gaggagatgg geeteaceag eagettetee
                                                                     2340
aagtgaaggg cccatgtgtg ctcacctctg ggaaaagcgg gtgagcagga ggcatgaggt
                                                                     2400
acaatgcctg ccatcatggg tcagaaattt gaaggatgaa gaaatctact gtttgaaatc
                                                                     2460
                                                                     2520
ctcacctttc agacgtattt tctttattca catcccagga gcatccattt taaggaacta
ttctttggaa aaaaccgaaa aacataaaaa acaacaaaaa aagctaagtt ataagtgaac
                                                                     2580
tgtttggctg cactgtatgt cacttttgct tgttgtcatg tgaacttgga aactaaggtt
                                                                     2640
actogtgtgc ataaaaattc taaatgaaag ggtgtggttt ccatcaatct gatgctgccc
                                                                     2700
ategettgea etggggtett tgtggategg geaggagttt teagtgtgtt gggtgttget
                                                                     2760
cetteetatg tgtettttga atetgagget gacatttget tggaaggeea gaceettget
                                                                     2820
ccatcagaga gggcagtggc aaaggccagt gaggcagctg tgagttggac agggttccag
                                                                     2880
gtggagatgg tgttgtcatt tgtgcttact gttggtggtg ctcagggtgg ataacacggg
                                                                     2940
tegttetgge agecegette ageacaaata ggeagettaa ggeetggete acaaggetgt
                                                                     3000
ggggttaaat ctggctctgc agaggcccta ggccagcttg ttgaactgct gtctggttga
                                                                     3060
atgaacgtgt gtgcaaagca aggctcttag caaacatgat cactgtcctt gccttcctgg
                                                                     3120
ttetttetet eggttggttg ceagggettg eagategeag tgaattttee ttggggaaca
                                                                     3180
tegetgtttt gteetagagt gaacttgtgg ettatggeea gtgetgtttg gtggtetgee
                                                                     3240
ttetttttaa tggtatttte tteeteagag cagaaggget geattttget tateagaaga
                                                                     3300
aggtgcagat ttaagggaat tcatatgagg tggcatgtaa ttggcaggcc aggtgtcctg
                                                                     3360
gttccaggtt ccagccaggc tttgggttgc cccctccatc tctgcccccc tctggatttt
                                                                     3420
gcatacagcc tcatacagtg caaacaagga tgtgacttgc tcagcttagt catgtgattt
                                                                     3480
                                                                     3494
atttaaaaaa aaaa
```

```
<210> 6084
<211> 4407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (447)...(2959)
<223> similar to gi4886427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6084
tttcgtttct cgcgcggatg gtgaagctga atttggttcg ctttaccctc ggacaggaga
                                                                       60
gcacggctgg gcacgggggg actcaccgcc agtgagagta gggacgaagg ctcagggaag
                                                                      120
gcgagcttcg gtccaagccg ttggggtgtg gggaggggaa tccatttcgt agacagctct
                                                                      180
gccgaggcac ggagagggc ggtgctgctt ggggtcaact gggatttagg gcttggattc
                                                                      240
atttaagaac ctgagcttcc ttcaccaaac ctagacagca agagagagac aagcccgagg
                                                                      300
cctgacttct agcactcctg agtttgagcc ctatgagcag tggaacctag ggaccaccaa
                                                                      360
ggatccagat ataattcttt cctcagtaat agaaaaaaga atctgggatc taagaagata
                                                                      420
cctactcatt ttctaagtga ctggccatgt cattgtccca cttataccgg gatggggaag
                                                                      480
gccgcattga tgatgatgat gacgagcggg agaactttga gatcactgac tgggatctcc
                                                                      540
agaatgagtt caaccccaac cgacagcgcc actggcagac caaggaagaa gccacctacg
                                                                      600
```

```
gggtgtgggc agagcgagac tcggatgatg agaggcccag ctttggaggc aaacgggccc
                                                                      660
gtgactactc tgcgccagtc aacttcatca gcgcagggct caagaaaggg gcagcggagg
                                                                      720
aggcagagtt ggaagattct gatgacgaag agaaacctgt taagcaggac gactttccta
                                                                      780
aggattttgg accaaggaag ctaaaaacgg gtggcaattt taagcccagc cagaaaggtt
                                                                      840
ttgcaggagg aaccaaatct ttcatggact tcggcagctg ggaaagacac acaaaaggaa
                                                                      900
ttggacagaa gcttcttcag aagatgggct acgtccctgg acggggcctc gggaagaatg
                                                                      960
cacaaggtat cattaaccca attgaagcca agcagagaaa gggaaaaggt gctgtggggg
                                                                     1020
cttatggatc cgagcgcacc actcagtcca tgcaagactt ccctgtggtt gactcagagg
                                                                     1080
aagaagctga agaggagttt cagaaggagc tgagccagtg gaggaaagac ccaagtggaa
                                                                     1140
gcaagaagaa gcccaaatac tcttacaaga ccgtggaaga gttgaaggcc aagggcagga
                                                                     1200
ttagcaagaa gctcactgct ccccagaagg aactttctca agtcaaggtc atagacatga
                                                                     1260
caggccggga gcagaaggtc tactacagct acagtcagat cagccacaag cacaacgttc
                                                                     1320
ccgatgatgg gctgccgcta cagtcccaac agctgccaca gtctggcaaa gaggccaagg
                                                                     1380
ecceeggett egegetgece gagetggage acaacetgea getgeteate gaceteaegg
                                                                     1440
agcaggagat catccagaat gaccggcagc tacagtatga gcgggacatg gtggtcaacc
                                                                     1500
tettecatga getggagaag atgacegagg teetggaeca egaggagegg gteatetega
                                                                     1560
acctcagcaa ggtcctggag atggtggagg agtgcgagcg gcggatgcag cccgactgca
                                                                     1620
gcaaccccct caccctggac gagtgtgccc gcatcttcga aaccctgcag gacaagtact
                                                                     1680
atgaggagta caggatgtcc gaccgtgtgg accttgctgt ggccatcgtc tatccactca
                                                                     1740
tgaaggagta cttcaaggag tgggatcccc tcaaagactg cacttatggc accgagatca
                                                                     1800
tetetaagtg gaaaageete etagagaatg accagetett gteecatgge ggacaggace
                                                                     1860
tctcagcaga tgcctttcac aggttgatat gggaagtctg gatgcctttt gttcgaaata
                                                                     1920
ttgtcaccca gtggcagcca aggaactgtg acccgatggt ggactttttg gatagttggg
                                                                     1980
tgcacattat tcctgtgtgg atcttagata acatactgga ccaactcatc ttccccaaqc
                                                                     2040
tgcaaaagga ggtggaaaac tggaacccgc tcacagacac tgttcccatc cactcttgga
                                                                     2100
tecacecatg getgeceett atgeaggeac ggetggagee actetattee eccateegta
                                                                     2160
gtaagctgtc cagcgccctg cagaagtggc accccagcga ctcctctgcc aagctcatcc
                                                                     2220
tecageeetg gaaggatgte tteacteetg geteetggga ageatteatg gteaaaaaca
                                                                     2280
tagtgcccaa gctggggatg tgtcttggtg agctagtcat taacccccac cagcagcaca
                                                                     2340
tggatgcatt ctattgggtg attgactggg aagggatgat ctctgtctct agcctggtgg
                                                                     2400
gacttettga aaagcactte tteeccaagt ggetteaggt getgtgetet tggeteagta
                                                                     2460
acagcccaaa ttatgaggag atcaccaagt ggtacctggg ttggaagtcg atgttctcag
                                                                     2520
accaagtgct ggcacatcca tctgtcaagg acaaatttaa tgaggcactt gatatcatga
                                                                     2580
accgggcggt gtcctccaac gttggtgcct acatgcagcc caggagcacg ggagaacatt
                                                                     2640
gcctatctca cccacacgga gcggaggaag gacttccagt acgaggccat gcaggagagg
                                                                     2700
egggaggetg agaacatgge teaaagggge attggegtgg eegetagete tgtgeeeatg
                                                                     2760
aactttaagg acctcattga gaccaaggct gaggagcaca acattgtctt catgcccgtc
                                                                     2820
attgggaage gacacgaagg gaagcagete tacacetttg geegcattgt gatetacate
                                                                     2880
gaccggggag tggtctttgt ccagggcgag aagacgtggg tgcccacctc actgcagagc
                                                                     2940
ctgatcgaca tggccaagtg aactgtggca ggtccagaac cagtcagaga cttgccccta
                                                                     3000
agagggatgt actgtaaata aacagtattt ttagatcacc ttcaaaaggg taacttcttt
                                                                     3060
actcaggage tactccacat caggccaggt catgagggaa ggatgtaaaa cgggacaatg
                                                                     3120
ccacggtagg gcaggaatct ttataccaag tcctcatgtg gggtatcgtc ctcaaaacag
                                                                     3180
gacagecaag tigatgitet tieetggeaa aggagitete tiggtagitee teeatageag
                                                                     3240
ccttcccttt agtctctggt ggcagcttct acctcagcca acactgagta cctcacaacg
                                                                     3300
agttcagtca gtagcagaag gatcttctct cttgttcctg atgatttcaa ggtcctcaca
                                                                     3360
gtcctgataa tctggttctt cccgaaactc cccaaatatc ctatggagag ctggttctag
                                                                     3420
cttttgcaca gggaaccagt ggacagaggt atcattaaat atgtccatgt attgtgaagt
                                                                     3480
ctgaggaaac tcaagctcct ccagtccttt taaaatctga gcagaaaaat tcaagtataa
                                                                     3540
aaacttcaga tagtcacagt aatccccact cttttgggat aaatttccac tttacttgtc
                                                                     3600
atccccactt tactttttaa aaaaataaca aatagggtat tttgatttaa atgcttttgc
                                                                     3660
ccaatgaatt ggggcgcccc aaggacagtg gatatcatgg actgtgatac taagaataaa
                                                                     3720
ggaaataagg aaaaaactta gagatgcatt taagagtcat agctttctgg aacacagacc
                                                                     3780
catggagaga getgacagta caettgegee aettaggeea tgagttteet eetaeggetg
                                                                     3840
taaagaaaga tagaattett eteagtttea caccetttte cateceagee eetttattea
                                                                     3900
gatagatacc tttgcaatgt agggataatt tttctgcaga atccttgcca acaacctaga
                                                                     3960
aattaaaaaa aaccaaaaaa acaaaaaaaa aaaccatgat taggaggtat gaggatagtt
                                                                     4020
```

```
4080
tcattcaact tttaaaacac ataaaagggc aagatgattg aagcatagta agaattcagg
aaaaaactca agatgtggag taaaccagtt aaatagttga aaatgtgggc caggcgcagg
                                                                     4140
taatcccagc acttcaggag actgaggcgg gcggatcatt tgaggtcagg agttcaagac
                                                                     4200
cagcatggcc aacatggtaa aaccccatct ctactaaaaa tacaaaaatc agccgggcgt
                                                                     4260
                                                                     4320
cctggtgtgc atctgtaatc ccagctactc attaggctga ggtaggagta tcgcttgaac
ccaggagaca gaggttgcag tgagctgaga ccataccact gcactccagc cggggggaca
                                                                     4380
gagtgagact ccatctcaaa aaaaaaa
                                                                     4407
```

```
<210> 6085
<211> 1734
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (160)...(1624)
<223> similar to gi5916108 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

60

1620

1680

1734

<400> 6085

ggcacgaggg gccgcagctc ctccggctct gcagggtcac ggaggaagcc agctccccta gtccaggccg agettgcact tgcgtcttgt ctgctgctgc tgaaccaaga tttagctgtg 120 egeceteett geagteteet ggaaceagea ggaggaaaca tgggggatae tggcetqaqa 180 aagcggagag aggatgagaa gtcgatccag agccaagagc ctaagaccac cagtctccaa 240 aaggagetgg geeteateag tggeatetee ateategtgg geaceateat tggetetggg 300 atcttcgttt cccccaagtc tgtgctcagc aacacggaag ctgtggggcc ctgcctcatc 360 atatgggcgg cttgcggggt cctcgcgacg ctgggtgccc tgtgctttgc ggagcttggc 420 acaatgatca ccaagtcagg gggagagtat ccctacctga tggaggccta cgggcccatc 480 ecegectace tetteteetg ggecageetg ategteatta ageceaegte ettegecate 540 atctgcctca gcttctccga gtatgtgtgt gcgcccttct atgtgggctg caagcctcct 600 caaatcgttg tgaaatgcct ggccgccgcc gccatcttgt tcatctcgac agtgaactca 660 ctgagcgtgc ggctgggaag ctacgtccag aacatcttca ccgcggccaa gctggtgatc 720 gtggccatca tcatcatcag cgggctggtg ctcctggccc aaggaaacac aaagaatttt 780 gataattett tegagggege eeagetgtet gtgggageea teageetgge gttttacaat 840 ggactetggg cetatgatgg atggaatcaa etcaattaca teacagaaga aettagaaac 900 cettacagaa acctgeettt ggeeattate ategggatee eeetggtgac ggegtgetae 960 atcctcatga acgtgtccta cttcaccgtg atgactgcca ccgaactcct gcagtcccag 1020 geggtggetg tgacatttgg tgaccgtgtt ctctatcctg cttcttggat cgttccactt 1080 tttgtggcat tttcaaccat cggtgctgct aacgggacct gcttcacagc gggcagactc 1140 atttacgtgg cgggccggga gggtcacatg ctcaaagtgc tttcttacat cagccgtcag 1200 gcgcctcact ccagcccccg ccatcatctt ttatggtatc atagcaacga tttatatcat 1260 ccctggtgac ataaactcgt tagtcaatta tttcagcttt gctgcatggc tgttttatgg 1320 cctgacgatt ctaggactca tcgtgatgag atttacaagg aaagagctgg aaaggcctat 1380 caaggtgccc gtagtcattc ccgtcttgat gacactcatc tctgtgtttt tggttctggc 1440 tccaatcatc agcaagccca cctggggagt acctctactg tgtgctgttt atattaaggc 1500 ggccttttat tttacttcct gtttgtccac tacaagtttg gatgggctca gaaaatctca 1560

aagccgatta ccatgcacct tcagatgcta atggaagtgg tcccaccgga ggaagaccct

gagtaacaag ctccgtctct tgtagccaag tcagctgaat ttattttctt aagcaatatt

tgtggttatt tcttcctttt tttcctacga ataaaatata ctcagatgtt taaa

```
<211> 884
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (271)...(56)
     <223> similar to gi55677 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6086
ggcacgagcc tgcagggcct cagagaagca tgggaaagcc cttcaggtgt taggggaagg
                                                                       60
tgattttgag ttgttccttc actttgttga atgtctctqa aatccaqttc tqqqqcttqq
                                                                      120
caggaatgtt gccgcttgca gtggctgccg ttcagcttat ctgggatgtg tcccaagatg
                                                                      180
ctggagttgt ctggggccat ccagactggg gctgggattt ccacacccat ggagccacga
                                                                      240
ctaggactgg gagtgacaga acgagtttgg gggtgctgcc agaggggcac tctagattgt
                                                                      300
tettgggata geacaggtte ecagatacag ttetaageea ttgagggget aggageagaa
                                                                      360
tegtettagt ggaggtgatt getaactetg aggtgtaett gecatgagee agttgetgtt
                                                                      420
aggggatgag ctgattcctg tcactcccac tttagagggg atgctgacac agctagtgag
                                                                      480
aggtggggca gggacttgaa cctctattct ttagctatag aacttctgtc cttaaccact
                                                                      540
atgetatgee taaaatetga ggagaettet ggtaggaete ttteteecae ageecaaagg
                                                                      600
aaaaaggaag ccccaagaaa tgttttatct tagggaaact ttcttggaac cacttccttc
                                                                      660
ceteaggeet geactggttt ttgtagtgae tetaaggatg tetgteatge aaggatgtgt
                                                                      720
tacctatggc cccatgtcag gagaatgatt aggttcctgt gaagtttaaa aaaaatcctg
                                                                      780
ttagatacta gagatacaca gtaactgcca tatattactt tctacatgca aggcacttgt
                                                                      840
acagaggttg aaaagatgtc tccatttaag cgtccattta agcc
                                                                      884
     <210> 6087
     <211> 2054
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(2055)
     <223> n = a,t,c or q
    <220>
    <221> misc feature
    <222> (72)...(1449)
    <223> similar to gi2337865 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

<210> 6086

```
<400> 6087
eggeegegte gaceegeace atggggteee gecaettega ggggatttat gaceaegtgg
                                                                       60
ggcacttegg cagattecag agagteetet attteatatg tgeettecag aacatetett
                                                                      120
gtggtattca ctacttggct tctgtgttca tgggagtcac ccctcatcat gtctgcaggc
                                                                      180
ccccaggcaa tgtgagtcag gttgttttcc ataatcactc taattggagt ttggaggaca
                                                                      240
ccggggccct gttgtcttca ggccagaaag attatgttac ggtgcagttg cagaatggtg
                                                                      300
agatetggga geteteaagg tgtageagga ataagaggga gaacacateg agtttggget
                                                                      360
atgaatacac tggcagtaag aaagagtttc cttgtgtgga tggctacata tatgaccaga
                                                                      420
acacatggaa aagcactgeg gtgacccagt ggaacctggt ctgtgaccga aaatggcttg
                                                                      480
caatgctgat ccagccccta tttatgtttg gagtcctact gggatcggtg acttttggct
                                                                      540
acttttctga caggctagga cgccgggtgg tcttgtgggc cacaagcagt agcatgtttt
                                                                      600
tgtttggaat agcagcggcg tttgcagttg attattacac cttcatggct gctcgctttt
                                                                      660
ttettgeeat ggttgeaagt ggetatettg tggtggggtt tgtetatgtg atggaattea
                                                                      720
ttggcatgaa gtctcggaca tgggcgtctg tccatttgca ttcctttttt gcagttggaa
                                                                      780
ccctgctggt ggctttgaca ggatacttgg tcaggacctg gtggctttac cagatgatcc
                                                                      840
tetecacagt gaetgteece tttateetgt getgttgggt geteecagag acacettttt
                                                                      900
ggcttctctc agagggacga tatgaagaag cacaaaaaaa tagttgacat catggccaag
                                                                      960
tggaacaggg caagctcctg taaactgtca gaacttttat cactggacct acaaggtcct
                                                                     1020
gttagtaata gccccactga agttcagaag cacaacctat catatctgtt ttataactqq
                                                                     1080
agcattacga aaaggacact taccgtttgg ctaatctggt tcactggaag tttgggattc
                                                                     1140
tactcgtttt ccttgaattc tgttaactta ggaggcaatg aatacttaaa cctcttcctc
                                                                     1200
ctgggtgtag tggaaattcc cgcctacacc ttcgtgtgca tcgccatgga caaggtcggg
                                                                     1260
aggagaacag teetggeeta etetettte tgeeagtgea etggeetgtg gtgtegttat
                                                                     1320
ggtgatcccc cagaaacatt atattttggg tgtggtgaca gctatgggtt gggaaaattt
                                                                     1380
tgnccatcgg ggcagcattt gggcctcatt tatctttata cagctgagct gtatccaacc
                                                                     1440
attgtaagat cgctggctgt gggaagcggc agcatggtgt gtcgcctggc cagcatcctg
                                                                     1500
gegeegttet etgtggaeet eageageatt tggatettea taccaeagtt gtttgttggg
                                                                     1560
actatggccc tcctgagtgg agtgttaaca ctaaagcttc cagaaaccct tgggaaacgg
                                                                     1620
ctagcaacta cttgggagga ggctgcaaaa ctggagtcag agaatgaaag caagtcaagc
                                                                     1680
aaattacttc tcacaactaa taatagtggg ctggaaaaaa cggaagcgat tacccccagg
                                                                     1740
gattetggte ttggtgaata aatgtgeeat geetgetgte tageacetga aatattattt
                                                                     1800
accctaatgc ctttgtatta gaggaatctt attctcatct cccatatgtt gtttgtatga
                                                                     1860
ctttttaata aattttgtaa gaaaatttta aagcaaatat gttataaaag aaataaaaac
                                                                     1920
taagatgaaa attctcagtt ttaaaaactg ctttcttatt gctgcaaaat atttttcaac
                                                                     1980
atttgttttt ctatgtagtt gattctcaac ctttccccac cacccccta ccaagctcgt
                                                                     2040
gccgaattct gcgc
                                                                     2054
```

```
<210> 6088
<211> 2604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (408)...(812)
<223> similar to gi4886499 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6088

```
ggaattegtg eteegeetee ggtettaegt ttegeeceeg geagegeega eageggaece
                                                                       60
aagatggcga ccgagttgga gtacgagtct gtgctgtgtg tgaagccaga cgtcagcgtc
                                                                      120
taccggattc cgccccgggc ctccaaccgc ggttacaggg cctctgactg gaaattagac
                                                                      180
cagcctgatt ggactggtcg cctccgaatc acttcaaaag ggaagactgc ctatatcaaa
                                                                      240
ctcgaggata aagtttcagg ggagctcttt gctcaggcac cagtagaaca atatcctggt
                                                                      300
attgctgtgg agacggtgac agattctagc cgctactttg taatccqqat ccaqqatqqt
                                                                      360
actggtgggt aaagcaggaa tctgagattt ccaaggaatc tcaagaaatg gatgctcgtc
                                                                      420
ctaagttgga tctgggcttc aaggaaggac aaaccatcaa gttgtgtatc gggaacatta
                                                                      480
caaacaagaa aggaggtgct tctaagccca ggactqcaaq qqqtqqqqt ctqaqcttac
                                                                      540
teccaecece gecaggagge aaagteacta tteccecaec atectectea agttgecate
                                                                      600
aaccaatcat gtcaccccac catccattcc gaaatctaac catggaggca gtgatgcaga
                                                                      660
tatcetttta gatttggatt etectgetee tgteaegaca ecageaceaa etecagttte
                                                                      720
tgtaagcaat gacttgtggg gagacttcag cactgcctcc agctctgttc caaaccaggc
                                                                      780
accacagcca tccaactggg tccagttctg aatggcattg gcaggacatt aaggacagac
                                                                      840
ttgaggaata aaaatgacct tgagggcacc aatctgtgag ggaagttagg aacccatttc
                                                                      900
ctccccagaa ccagaatgac tggacaatct ttttcatagc ttctccatca cattcaagct
                                                                      960
ggtttatgtc actcccctgt gttgttactt gtacagccaa gaaagtatct gttatctcct
                                                                     1020
gcgtagtacc aaggtagggg gactagttgg atcttattat aqttttqqqc tqqactatqc
                                                                     1080
agggettaaa aggeeagegt etgtttgagg gggaatgace tetaacatet gtaaaatttg
                                                                     1140
tctcatcttt taatttcttt aacttatttc aaaatcatct catgaccctt gtgtqcctct
                                                                     1200
ttgtgaagcc ctatttagca atttcagggg agtcaaaaac cttgcaactt ccttctccac
                                                                     1260
taacccagga ctaaaaatgg acaggctgac ctcagtgttt acaaattcag aattttgata
                                                                     1320
ggggtagata tggagaaaga cctatttcct gggtctctgc tgtgtagtct ccttcaggct
                                                                     1380
tattgtgctc agtgaacatc cagtgctggg tgcagctcca tcaccctctt gtgtgtttac
                                                                     1440
atgtctcttt ctatgataag agggttgtgt tggtggcacc tccactactc ttttctgttt
                                                                     1500
gttgagtttg aattgtgtaa catctttgat cagtgggtgt atctgtaatg aaggaggttc
                                                                     1560
aagaggctgt gctttccaag tgatagtcta taggagtgtt taatttcttg cagctccatc
                                                                     1620
tggttgctgc atttgaagca tggcattaat ttgtatttgc cctgttcttt gacctaaagt
                                                                     1680
tgaagggttt agagttttta acctgatctg tagagcagag aggttgaaag cacttaactc
                                                                     1740
ttgtttagta tcctcattgc cttgctgcct gggtatctgg cccctttcca taaacatttc
                                                                     1800
ttttcagttc atgtagttct ttaatagaaa gctqctatta tqtatattqt catttqtqaa
                                                                     1860
ggaagttgga gagtcacagc tttactgtga caggttttgc ccaaggcttt gatacctgtc
                                                                     1920
acccagggta tottaaaagc aagttgttot cocactactt tootttooot otgooctgoo
                                                                     1980
attectatta caatgetgtg aaaaaagtte tgettettag gtgaatgggt actttetatt
                                                                     2040
ttgtttctaa acgagcaatt ttgaggatga aatgggaaga tatcattgct tcctttttgc
                                                                     2100
acctattggg tatgtacact ctggccgaag ggagtcctta tgtttagttt caaaatatat
                                                                     2160
tactttcctg gattctcttc ttcacttttt ctgactttgg gtccattttc ttttcattgc
                                                                     2220
ctccttttcc aggcagctct attcttgcag agccatagca ggacatgtta aaattccaat
                                                                     2280
agaaaacact aaaaggaaag tetgtggaat caetagtgae taaataetgg gaacetattt
                                                                     2340
totcaatott cotocatgtt gtgttotttg tattottgag atgataatat attatgtatt
                                                                     2400
tgaattcctg aaaaatggaa aatgtttaag atatatgtat ataaatgatt atgctgtatt
                                                                     2460
ggtgcaataa tggtaattaa aaatatgaaa aaaagtgtct cttttatctt ttaatttgct
                                                                     2520
tatttgatta ccttttaaat ttaattgacc aaatataagt ggaccagtag ttaataaagg
                                                                     2580
atatttatat cactctttat taag
                                                                     2604
```

```
<210> 6089
<211> 4446
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (309)...(1361)
```

<400> 6089 cgaccggctg gagttacggg ccgacgactt cgttggcgtt cctggctcct cgggattttc 60 cttttcctcc taagctgctg attcatcccc aggctgttgt caggctcagc tgtggggctg 120 180 ggagcatggg ctctcaggct gctgctgagt ggaggaactg ggcctcctgg gaggggtcct ccagcetete tggatgetee atggggtget teaaggatga eegeategte ttetggaett 240 300 ggatgttete cacetactte atggagaaat gggeteeceg geaggaegae atgettttet atgtgcgccg gaagctggcg tactccggca gcgaaagcgg tgcagacggg aggaaggcag 360 ctgagcctga ggtggaggtg gaggtgtacc ggcgggactc caagaagctg ccaggcctgg 420 gagaccetga categactgg gaggagageg tetgeetgaa teteateetg cagaagetgg 480 540 actacatggt gacctgtgcg gtgtgcacac gtgctgacgg cggggacatt cacatccata agaagaaatc tcagcaagtg ttcgcgtccc ccagtaaaca ccccatggac agcaaggggg 600 aggagtecaa gateagetae eccaacatet tetteatgat tgacagette egaggaaggt 660 gttcagcgac atgaccgtag ggaaaggaga gatggtctgt gtggagctgg tggctagtga 720 780 caaaaccaac acgttccagg gggtcatctt tcagggctcc atccgctacg aggcgctcaa gaaggtgtat gacaaccggg tgagcgtggc cgcccgcatg gcacagaaag atgtcgtttg 840 gcttctccaa gtacagcaac atggagtttt gttcgccatg aagggccccc agggcaaggg 900 960 ccacgccgag atggcggtca gccgagtgtc tacaggtgac acatccccct gtgggactga agaggaetee ageceagett egeceatgea egagegggtg aceteettea geacacecee 1020 caccccagaa cggaacaacc gtcctgcctt cttctcccca tccctcaaga ggaaggtgcc 1080 geggaacegg ategetgaga tgaagaagte geacteggee aacgacageg aggagttett 1140 ccgggaggac gacggtggag ccgatctgca caatgcaacc aacctgcggt ctcggtccct 1200 gtegggcaca ggacggtccc tggtcgggtc ctggctgaag ctgaacagag cagatggaaa 1260 cttccttctc tatgcacact taacctacgt cacgttgccg ctgcatcgga ttttaacaga 1320 catcetggaa gtteggeaga ageceateet gatgaeetag eegegtgegg ageetgegea 1380 gageceegge egggeeeage ceteggagtg etgeeaagtg ectacetgte cacegeeace 1440 ggggtctgcg atggcacgcc agtgctggag ccgcagccag gcgaggccac tcgactcccg 1500 gggccggggc cgactccacg aacaccagcc caaactgaag tgcctcttcc ctcccctqct 1560 ggegetgete egecetgtge ecceegecea tegececea eccatetetg gagagecete 1620 tgcacccaaa gaggactaga gatgccgagc ggccatgaga gagagcggaa ggagcagctg 1680 atgcccagag cggggccaga gcggcgggtc tatgttcacg tccccccagc agcaggcgga 1740 accacccage cagggcacte agtgcattgg actgtccaca tgttcttgag gaaagccggt 1800 ggaagattet ggaatgeegt geggatgaac tteagegeee gagteagtee eageteatee 1860 tececagttt accaetttgt tetaatagga gatgggaaca egagaagttt gatggetttg 1920 ccctgggctg ggaatacctc acccacgccc agttccagaa aggcctccag ctgagcagac 1980 ggccccgatc ccgccagaac ggccttttgc ttccagccaa agaacaccgc caacacgcac 2040 acctccaacc tgggacatcc cacgctgggc ctcgcacgga ggaacctgca gaatttggat 2100 tetgagggta gtegggagge eteggtagee aggeagaaca ggatatetge caaagggtgt 2160 ctgatgtggg gtggggctgg catcetecca ggaaggttet aggtgggace cegtettetg 2220 ggggcggggg tgtcttttca tcttccctgg tttcctagaa ctcacttcct ttgacggcgt 2280 gtgttggtcc catctctcag accagctcac tgaggcagag gagttgctca gaggctcaca 2340 tgggcacccc cattggttcg tgtgagcagc tgcccagccc caggcctgcc ctcggcctgg 2400 tecageatga aggegtttee atetgeaagg atgeaeggta ceeteeega gageaggeet 2460 gtcccctacc caactgggaa taaactggaa gctgggtctc tttgttgcta tgtttttttg 2520 tttgaagttc ccaggaatat ttgaggggtt ccggtgatgt gtttagggat cttctctgtg 2580 ggggaaaagg aagaggaggg tcttgttctc ccatctgttt attctttggg ctctgggaac 2640 aggggactac tttgggggctt tctccagact tttgtatgtt gttattaaaa gcgagctatt 2700 gcatttcatt ctgcctcagt ttgcccacct gtgaaatggg gctgatacca cctacctcac 2760 tgaagtccca gggttcaagt gtgtggctgg gtcagggcgt ggtcacccgt cattctgcat 2820 aggtcgggtt ggatgttaga ctcctgggat gccctcctcc cccctcgccc tttgtaataa 2880 cetaatetga gacegtgett ggtgggggga tgtgaacttt eteteteec cageagtgte 2940 tgctcaggcc tgacagctca gctctgcacg atttcatgtt cctaaaccca tgtcttaggg 3000

```
cagcacagag ccaggtcatg tcatgcccca aagtgtgggg acagagcctc agggagcccc
                                                                  3060
gagcatggtc cagccccatt tgagtgctct ccggggatgc caaatgctgc ttccaagttt
                                                                  3120
gagtecatgt ggetaaaata cacccattte tteaggaaet etteeeetgg ttgttetggg
                                                                  3180
gatcttggga gaaacacagc cctgacagct cgtccgtggg aagatgaggc agtccaggtt
                                                                  3240
gtgaggagca cagcggcccg ccctctgttc tcagaggtga ggggcgggag aaggttgtct
                                                                  3300
cctctggggc cagcatttgg ccaagctcgg aggcttggcc agcactgctg gatggctcag
                                                                  3360
agcaagetgg geteecegte tgtaagatgg caaaaatget geeeceetea cagggtgaee
                                                                  3420
atgaggacca gtcacagtga tgtgtgaaag ggctcgctgg tcacagaaac gtgtacaaat
                                                                  3480
catgctattt tagagatcag ccctcaattt gtaaggcatg tgaacagggc acgcggtggg
                                                                  3540
ctggtggttt catagccgac acacagcgcc taccatgtgc agctgcctgt ccgaccccat
                                                                  3600
cttacagacg agaaaaccag cacacaggca ccaaggaact gtccggaact aacagcaggg
                                                                  3660
3720
etgteeggae agatggaeag acaeteggtg gagtetgeet tteteaggee etaaateeet
                                                                  3780
ctccaaaggg tacttgcgat gccggattta aaacttgctc agagccactt agccacttga
                                                                  3840
gaaccagaca gtaaggtgtt actoccaggt ttgtttttcc aaagtaacag atgacatgtg
                                                                  3900
gaataaagta atagagtaac aagtggcagg gccagaacca gggtccccaa agtcctggtg
                                                                  3960
ttggcacatt tgtacttctt gtaagaccat ctttaatttt tctgggaaca cacctgcctt
                                                                  4020
ttgtgtaatg cggggaagac taatgcatgg tgacacctag ttttcctcaa caggacactt
                                                                  4080
gatcccaaaa cccctttaag accttaggtt tcctcagcgg aaaactgtac tttaatccca
                                                                  4140
aacccccttt aagacatatt ggggctgggc gcagtggctg cacgcctgta atcccagcac
                                                                  4200
tttgggaggc tgagatgggt ggatcacctg agatcaggag ttcaagacca gcctgactaa
                                                                  4260
catgctgaaa ccccatgtct actaaagata gaaaaattag ccggacatgg tggcaggcac
                                                                  4320
ctgtaatccc agctactcgg aaggctgagg aaggagaatc acttgaacct agtaggcaga
                                                                  4380
ggttgcagtg agccgagatc acgccattgc attctagcct gggcaacgag agcgaaactc
                                                                  4440
tgtctc
                                                                  4446
```

```
<210> 6090
<211> 3941
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3912)...(1655)
<223> similar to gi49518 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6090
ttttttttt ttcaagtata tttactcttt attgcattcc ttcatttgca ttaaacaata
                                                                       60
ttttttcaat acagttttgg acaaaacaca aagacattaa gctcatttaa caagagacat
                                                                      120
aagttaacac aatgtgtgct gctttcatga ggaggaaaga ggcaagatct tagaggaatc
                                                                      180
caggatactg gccaccagga atcacaggat ctcacaatac aatccacttc tttaaaagcc
                                                                      240
acaaaataag ctagggaaga aaacccaaaa caaagaagat atgacatcca agtctccacc
                                                                      300
aaaagtatac aaatggcaag atttggagat gatctgcttt ctcacatgag gacaaataac
                                                                      360
agaggagcca cacccaagtg ccactgtggc cacaagcctc atgggtggcg tgtgaggtaa
                                                                      420
gcaccttagg atggcttcta attgcttgtc cttgcatttt aagcagcagt tgggagagag
                                                                      480
aggcacactc cataagtctc atcaccaaat atgacctaat taaattcctg ctaagtcagt
                                                                      540
cagttgtaag acaaatcacc ctcaaaagga ctcaacgggt gcttcctttt ggaagaagtg
                                                                      600
tgtggagggt aaaggaaatg tgttcaatgt attggaatgg acaataaagg actgagggag
                                                                      660
agggctagaa aatgattgat ttttctggag aatagtgttt tagacactag atagtacaga
                                                                      720
```

```
780
tcatttaaaa taaaggataa attctaagta agtcattaag ctaaggaaaa agcagtgata
                                                                      840
ctagtaagcc ttaatattat actaaggaat tgacccactt ggagttggac actaattagt
                                                                      900
gctgagaggt ttgtaaatta ctttaataac tcctttctgt ttgggggtgt atgctttttc
                                                                      960
catacctatc tttcacatgt ttttaacaac atcttctaag tggtaataat gagcatatct
                                                                     1020
cttaccacag agcaaattag ttatacttaa ggggaagtca caacccaaca cggtagtcat
                                                                     1080
ctgactttct attaagaaag atcttcttga ctgcaacttg aaaacatctc tgacaatgat
tgagaacagc attttagaga ttcaatgcct tgtttcttca ggcaaagaga ataccagtct
                                                                     1140
tgtgggagac ctttaaccaa atacccagtg acttttagtg ttagctcagg acagctgtca
                                                                     1200
gaggatetet ggeecacace tegatttaet aagecagatt tgeatgtaga aagtetgeet
                                                                     1260
                                                                     1320
tctaatcggc caactgttgt catgcaacat tcatgacact gactgagagt tttcaagggt
gatggtgcta gtagagaggt tgaaacgtgt agtgtccaca agtactggat ggttcccacc
                                                                     1380
cagagggact gagcaagaag gaatcacttt agcctgcatg ggaaggtaag cgcagcattc
                                                                     1440
taaaccaaat tgacaccttc cacgagacac taagctatct cagtatgcat aaggaaggga
                                                                     1500
gttttattgc actaatcatg cagagcgagc acatgttgaa ggtagagaac gttccactta
                                                                     1560
gtccagtatc ttgagtaaga cagtgaagat cctaggccat cttcaccitg gtcacttccc
                                                                     1620
ttggtcactg tgtgtttcaa atagttcatt ttcaatcaaa atcaaggggg ctagctcctt
                                                                     1680
cttctcttaa gagggccaag aattttctca cacggtattc aggatccatc tgtagggaca
                                                                     1740
totogatoag cattagtaac ttottgatto ctatocagac tttottccct ttgacttgct
                                                                     1800
gtgcaattgt ggtgcgttcc ttatccttga agttgcccaa aagctccaaa gcttccaaca
                                                                     1860
gctgctctcc tgtggcaatg ttgggcacgt ggatggtggt gctgaaagcg ttaagcattt
                                                                     1920
ccatctcctg aaggacatct ttgcggctag tggtcccaat gataagaagc ttgcggccct
                                                                     1980
gaggaggtgc ctttttcagt aaaacgagaa gagcctgtaa tacaagattt gaaaatcgag
                                                                     2040
ggccaatagg gacgtaatca agcaatctct caatgtcatc cacaaccaca caactgagct
                                                                     2100
gggatttgta cgcatcatca aagatcttct tcatggcctg acatttggct gtttcagaaa
                                                                     2160
                                                                     2220
agccaatcat tttatcagga gaacagatct tgatgaacgg gaagttggat tcctctgcaa
                                                                     2280
tttttgcagc taaagcagtc ttcccactgt gaggagggcc ttccagaagc acgctgacca
atggtgtgcg gtcactgttc ttagtctgct gcaccagcag ctccccatca tctagaactc
                                                                     2340
gagtaactgg gtcaccccat ttgatgatac cgttcataat gtaacttgca taatcttctt
                                                                     2400
ggtttgtgcc aaaggctggt ttgatatcat tctccaaaga agcaaggaag tctcctctcg
                                                                     2460
teacttgeag getttetget ttetecatgt ceactteeae tttagtactg geetttatgt
                                                                     2520
gtctattcat agcagtggac tgggctgctc gcaccagacc ctccaattca gcaccactga
                                                                     2580
aattettggt etecaeggee agttetttaa tgtetaeate ageagagagt aaetgatgee
                                                                     2640
ctctcattct tgctgtgtgg atgtgaagaa tctgtagtcg gcctttctca tctggcaagc
                                                                     2700
ctatctccat tttaacttcc agtcttccag gtctaagaag agcctcatct atcagatctg
                                                                     2760
gtctattggt cattccaatg actaggatgt tgtttagctg ctccacgcca tcaattttgg
                                                                     2820
acagcaactg gttgacaaca gtgtcatgaa ctcccgtgct accagccatg ctccctctct
                                                                     2880
gcttgcagat ggcatcaatt tcatcaaaga tgatgatgtg caaaccactg ttagcaccaa
                                                                     2940
gesteetttg steetstea geatcageaa aaagtttgeg aatgttages tetgattete
                                                                     3000
ccacatattt gttaaggatt tctggcccat tgaccacttt gggctctctt gcattcaaca
                                                                     3060
tettgecaat etgtegagee aagagagtet taccacaace tgggggteca tataacagga
                                                                     3120
tgcctttaac atgtttacaa cccatctgct ccacaatctc tggaggaaat actcgggaag
                                                                     3180
caaatgctcg tcggaaaata tctgaaaacc cccttgtcta gacctcctat tcccattttt
                                                                     3240
tcaaagttcc agtcaggatt gataattgat tggcgatttt ccttggtttt agctttgcca
                                                                     3300
ataagattaa gtgacgaatt ttctgctttt tcaaatgcaa cttgactgtt tccaacaacc
                                                                     3360
agtectaett caatettetg cetttteeet gtegeagget etecetteag gatgetagga
                                                                     3420
tecatggatt caatgteett caccagtaag ccaaaaaget ttteattgaa getaaagaca
                                                                     3480
agctgttgtc ccactgagta ggcctggttg ttgaattgct gaataaattc tgctgccatc
                                                                     3540
ttgtcggtgt cataagggtt ggagtcaatg cttttttct gcaggaaatc aatctcgatg
                                                                     3600
gtcattgtgc caatacactg tttggctttg tcaaatgtat ataaggagac ttctatttct
                                                                     3660
tgcccaatag aaagcccagc ccattttctc tgaggtaaac tgaatgcaat gctccctgga
                                                                     3720
accaccgatg gatgtgtctt cagtgtaaat gtgtacctgt gattgggaga ggtcctcaca
                                                                     3780
atcacatgct ggccagactg gaaatccttt tcattcacaa ctgcacaatt ggttaaagat
                                                                     3840
aattcatctg taggacatct tgccgcttgc atgctccggc ccgccatctt cgcggacacg
                                                                     3900
tccggctcgg cggctgcagc tctgcgctcg gcaaaacgaa a
                                                                     3941
```

```
<210> 6091
<211> 3670
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)...(2131)
<223> similar to gi5139484 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6091 egggegegeg tecegteeag gteeggagta acegeegeeg eegeegeeaa agetegeeaa 60 catggcggac ctggaggctg tgctggccga tgtcagttac ctgatggcca tggagaagag 120 caaggcgacc ccggccgccc gcgccagcaa gaggatcgtc ctgccggagc ccagtatccg 180 gagtgtgatg cagaagtacc ttgcagagag aaatgaaata acctttgaca agattttcaa 240 tcagaaaatt ggtttcttgc tatttaaaga tttttgtttg aatgaaatta atgaagctgt 300 acctcaggtg aagttttatg aagagataaa ggaatatgaa aaacttgata atgaggaaga 360 ccgcctttgc agaagtcgac aaatttatga tgcctacatc atgaaggaac ttctttcctg 420 ttcacatcct ttctcaaagc aagctgtaga acacgtacaa agtcatttat ccaagaaaca 480 agtgacatca actetttte agceatacat agaagaaatt tgtgaaagee ttegaggtga 540 catttttcaa aaatttatgg aaagtgacaa gttcactaga ttttgtcagt ggaaaaacgt 600 tgaattaaat atccatttga ccatgaatga gttcagtgtg cataggatta ttggacgagg 660 aggattcggg gaagtttatg gttgcaggaa agcagacact ggaaaaatgt atgcaatgaa 720 atgcttaaat aagaagaga tcaaaatgaa acaaggagaa acattagcct taaatgaaag 780 aatcatgttg tctcttgtca gcacaggaga ctgtcctttc attgtatgta tgacctatgc 840 cttccatacc ccagataaac tctgcttcat cctggatctg atgaacgggg gcgatttgca 900 ctaccacctt tcacaacacg gtgtgttctc tgagaaggag atgcggtttt atgccactga 960 aatcattctg ggtctggaac acatgcacaa tcggtttgtt gtctacagag atttgaagcc 1020 agcaaatatt ctcttggatg aacatggaca cgcaagaata tccagatctt ggtcttgcct 1080 gegatttttc caaaaagaag ceteatgega gtgttggeac ceatgggtac atggeteeeg 1140 aggtgctgca gaaggggacg gcctatgaca gcagtgccga ctggttctcc ctgggctgca 1200 tgcttttcaa acttctgaga ggtcacagcc ctttcagaca acataaaacc aaagacaagc 1260 atgaaattga ccgaatgaca ctcaccgtga atgtggaact tccagacacc ttctctcctg 1320 aactgaagtc ccttttggag ggcttgcttc agcgagacgt tagcaagcgg ctgggctgtc 1380 acggaggcgg ctcacaggaa gtaaaagagc acagcttttt caaaggtgtt gactggcagc 1440 atgtctactt acaaaagtac ccaccacct tgattcctcc ccggggagaa gtcaatgctg 1500 ctgatgcctt tgatattggc tcatttgatg aagaggatac caaagggatt aagctacttg 1560 attgcgacca agaactctac aagaacttcc ctttggtcat ctctgaacgc tggcagcaag 1620 aagtaacgga aacagtttat gaagcagtaa atgcagacac agataaaatc gaggccagga 1680 agagagctaa aaataagcaa cttggccacg aagaagatta cgctctgggg aaggactgta 1740 ttatgcacgg gtacatgctg aaactgggaa acccatttct gactcagtqg caqcqtcqct 1800 1860 tactgacaat ggaacagatt ctctctgtgg aagaaactca aattaaagac aaaaaatgca 1920 ttttgttcag aataaaagga gggaaacaat ttgtcttgca atgtgagagt gatccagagt 1980 ttgtgcagtg gaagaaagag ttgaacgaaa ccttcaagga ggcccagcgg ctattgcgtc 2040 gtgccccgaa gttcctcaac aaacctcggt caggtactgt ggagctccca aagccatccc 2100 tetgteacag aaacagcaac ggcetetage acceagaaac agggagggte etegaggagg 2160 acacaccagg gtctcagcct tttggggtga acgaggatga ggcatctgat ctattcgcta 2220 2280 teeetgeett gteacatttg tetgeattag aaactaetga agaaataaaa gttettttte 2340 tttgctacac actttggtac ctatgaacct agaacttgaa gtgactccta cttatcacgt 2400

```
aaatttttat gtctgatatc aaacacatct tagactcccc agaatggaat ttaaagatgt
                                                                     2460
tcagtgttgg gtaacagatt gccctaagca ttgccacata ttctgtctag tcactgctga
                                                                     2520
ttttctatgt ctttgctcca tactgctggg ggatgggaga gccacagtgt gtttcttttg
                                                                     2580
tgcacttcgc aactgacttc ttgtcctggg gttaaaagtt gaagatattt tctgatgata
                                                                     2640
ttaaaagttg aagatatttc tgcacttggg ccctcctctg ggagccgtac ccacatgact
                                                                     2700
gecetgeete tgaccagtet gtteegggge eeeeteagee aggtgggaat gaeggacaeg
                                                                     2760
tactatccaa gtgtatggga ttaactaatc attgaaggca ttcatccgtc catcactgga
                                                                     2820
aagatttaca gtgattctga aggacaggcc gtggagtttt aggtttcagg ggcaagagca
                                                                     2880
gttttcaaaa gtctttgagt ccagtgtgca cgagtcgaca agcagtacct ggcatgcagg
                                                                     2940
agcactcatg ggtgagtccg tctcaggtct cgacaattag cagttgtgtg acagtcattc
                                                                     3000
tggttccttc tgcctgaccc tgggagacat atcagtaatg gatgtacaaa agcaggtctg
                                                                     3060
ttttatgtct tagtataatt tcagatgaat tgtattgaaa aaatgctgag gaatgaatgt
                                                                     3120
gtcaaaatgg gttaactgtg tatattgact ttcatgtcgt catgcatctq tcatqaatqa
                                                                     3180
atgatacttt gcactgggct gtacgacagt gaggacctta gggcatgaag cctttttcct
                                                                     3240
ggtcccagca gcatctgccc tgtgaagttt gttttctccc actgcctcca ggccccactg
                                                                     3300
atacccccaa atagatgetg ggttatgaga accagegaaa tececcatgt cateagtett
                                                                     3360
aaaaaaaaa ttttacaaat ccacgtattt gtcccattct tggagtagtt ttagtgtatq
                                                                     3420
tetttacatt aactactaac agtataaata acttgacate gtaattgtet geateetgte
                                                                     3480
cttgatattt ttagcagttc caaatctttg tttttgtatt tgtttgctgt gttcatgggc
                                                                     3540
aaagtaagta ctttttaatg cagttatttt gagagtttgg aagataatta ccaaaagggt
                                                                     3600
ccattatttc ataagagtta ctttgcaaaa aaaaaaaagg ggggtttttt ttttgggcaa
                                                                     3660
ttccaccaaq
                                                                     3670
```

```
<210> 6092
<211> 2933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (124)...(1931)
<223> similar to gi3820592 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6092
cggccgcgtc gacctctgtc agaaatgggg tcggagccat tcacctgtgt caagcagtgg
                                                                       60
aaatgctgtg ggaagcaaag tcagcagtcg aaccttgcag gaggcagcag gaggagaaag
                                                                      120
aacatggcgg gcgcatcaga gctcgggacc ggcccaggag cagcgggtgg agatggagat
                                                                      180
gattcgctat acccgatcgc ggttttaatc gacgagctcc gcaatgaaga cgtgcagctc
                                                                      240
cgactcaaca gtattaagaa gttatcaaca attgccctag cacttggagt agaaaggacc
                                                                      300
cgaagtgaat tgttgccatt tcttacagat acaatttatg atgaagatga ggtactatta
                                                                      360
gctcttgctg agcagctggg aaatttcact ggcctagtgg gaggtcctga ctttgcccac
                                                                      420
tgtctgctgc ctcctttgga aaatctggca actgtggaag agactgttgt tcgtgacaag
                                                                      480
gctgtggagt ccctgagaca gatctcccag gagcatactc ctgttgctct ggaagcttat
                                                                      540
tttgtacctc tggtgaaacg cttagcaagt ggggattggt tcacctctcg cacatctgca
                                                                      600
tgtggtttgt tcagcgtttg ctatcccagg gcatcaaatg ctgttaaagc agaaatcaga
                                                                      660
cagcaattcc gttccttgtg ctcagatgac acaccaatgg tacgacgtgc tgctgcttcc
                                                                      720
aaattgggtg aatttgcaaa agttttggaa ttagacagtg tgaaaagtga aattgttcca
                                                                      780
ctgttcacta gtctagcttc agatgaacag gattcagtgc gcctccttgc tgtggaagct
                                                                      840
tgtgtcagta ttgcccagtt attgtctcag gatgaccttg agactttggt gatgcctaca
                                                                      900
```

```
cttcgacaag cagcagaaga taaatcttgg cgcgttcqct atatggtggc tgacagattt
                                                                      960
tcagagetee agaaageeat gggteetaaa ateaceetaa atgaceteat eccegeettt
                                                                     1020
                                                                     1080
cagaacctac ttaaagactg tgaagctgaa gtccgggcag ctgctgccca caaagtaaaa
gaacttggtg agaacttgcc cattgaagat agagagacca taattatgaa tcaaattctg
                                                                     1140
ccttatataa aggaattagt atccgatacc aatcaacatg tcaaatcggc tctagcttct
                                                                     1200
gtaattatgg gattgtctac tattttgggc aaagaaaata ccattgaaca tcttctacct
                                                                     1260
cttttcttag ctcagttaaa ggatgagtgt cctgacgttc gtttgaatat catctccaat
                                                                     1320
ttggattgtg taaatgaagt gattggaatc cgtcagctct ctcagtctct ccttcctgcc
                                                                     1380
atagtggagc tggcagaaga tgccaaatgg agggtccgcc tggccatcat tgagtatatg
                                                                     1440
ccgctgctgg caggccagct gggtgtggaa ttctttgatg aaaagctgaa ttctttatgt
                                                                     1500
atggettgge tegtggaeca tgtataegee ateegagaag etgeeaceaa caaceteatg
                                                                     1560
aaactaagtc cagaagtttg gtaccagagt ggtcccaaaa tactattgtc cccaaagtgt
                                                                     1620
tagtaatggc aaatgatcct aattacttgc atagaatgac cactttattc tgcattaatg
                                                                     1680
cactgtctga ggcctgtggt caggaaataa ctactaagca aatgctgccc atcgtattaa
                                                                     1740
aaatggcagg agaccaagta gcaaatgttc gcttcaatgt ggccaaatct ctacaaaaga
                                                                     1800
ttggaccaat tctagatacc aatgctttac agggagaagt gaagccagta ctacagaagt
                                                                     1860
taggtcaaga tgaagacatg gatgtcaaat actttgcaca ggaagctata agtgttcttg
                                                                     1920
cattggcata atgaggagca ggagggaaaa ggcctttact agattcttgt cacaaatttc
                                                                     1980
tagtcaatgt gttcttaact gggtggagaa agaatggaaa accttcaaga tctcatccaa
                                                                     2040
gcaaatggca acaacttaga agaaatcatt tagtgactta attctttcta aagatgaaat
                                                                     2100
gggattgttt tttactcgtc ttccttgtta aatcattatt taagccgttc ttattgacca
                                                                     2160
attectgaca ettgattgte tectaatget ttatecatea ceaectggge teetgeatee
                                                                     2220
tcactgtgga atcaggcacc agccacataa tgttccagac aaagcctgga agggtgtgga
                                                                     2280
cccagacgtg gagtggagtg attetettga cgtttacata tatetetgtg tetetecate
                                                                     2340
attccaaagc taaatgtaca tgtttagaat aacttatttt ataaactctt cgggagacat
                                                                     2400
gttgagattt gaccgtaatg aaagccacat tttcctgaat tatgatggtc tgcattagtc
                                                                     2460
tcatgtgaaa ggggaatgtg gaagctcagg gttaatgtag tggttgtttt ggtttttatt
                                                                     2520
tgctcaattt tgtctgtact catgtcattc agaaacctga agtgtggctg catcttgctg
                                                                     2580
ctaatgtgtg atgttgacgc ctaactgaat ttgaacagct caccactgtg cctacattta
                                                                     2640
aaaatacttc tctctctttt ctaaaaagct ttaactgtag tgcctcctaa taagcagtat
                                                                     2700
gtttgtttca ttgtgagatt gcagttctgt atttcgaatg agtctaagaa ccacagggat
                                                                     2760
aatactgtgc agatttcctg ttctttacct ggctctgctt ccagcagtat tgacacctag
                                                                     2820
teettgetge attgtacagt agetttteaa actgcagttt tattgetaag tttttagtat
                                                                     2880
gggtgatact ggagtcttat catttgaagt ggttgctttt ctacttttac agt
                                                                     2933
```

```
<210> 6093
<211> 3490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (91)...(2613)
<223> similar to gi388765 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
gaaataggac acagagctct ggagtttctt cagcttcaca atgggcgtgt taactacaga
                                                                      240
gagctgttac tagaacacca ggatgcgtat caggctggaa tcgtgtttcc tgattgtttt
                                                                      300
                                                                      360
taccctagca tctgcaaagg aggaaaattc catgatgtgt ctgagagcac tcactggact
                                                                      420
ccgtttctta atgcaagcgt tcattatatc cgagagaact atccccttcc ctggggagaa
                                                                      480
ggacacagag aaactggtag ctttcttgtt tggaattact tctcacatgg cggcagatgt
                                                                      540
cagetqqcat aqtetgggcc ttgaacaagg attecttagg accatgggag ctattgattt
                                                                      600
tcacggctcc tattcagagg ctcattcggc tggtgatttt ggaggagatg tgttgagcca
gtttgaattt aattttaatt accttgcacg acgctggtat gtgccagtca aagatctact
                                                                      660
                                                                      720
gggaatttat gagaaactgt atggtcgaaa agtcatcacc gaaaatgtaa tcgttgattg
                                                                      780
ttcacatatc cagttettag aaatgtatgg tgagatgeta getgttteca agttatatce
                                                                      840
cacttactct acaaagtccc cgtttttggt ggaacaattc caagagtatt ttcttggagg
                                                                      900
actggatgat atggcatttt ggtccactaa tatttaccat ctaacaatct tcatgttgga
gaatgggacc agtgactgca acctgcctga gaaccctctg ttcattgcat gtggcggcca
                                                                      960
                                                                     1020
gcaaaaccac acccagggct caaaaatgca gaaaaatgat tttcacagaa atttgactac
                                                                     1080
atccctaact gaaagtgttg acaggaatat aaactatact gaaagaggag tgttctttag
                                                                     1140
tgtaaattcc tggaccccgg attccatgtc ctttatctac aaggetttgg aaaggaacat
                                                                     1200
aaggacaatg ttcataggtg gctctcagtt gtcacaaaag cacgtctcca gccccttagc
                                                                     1260
atcttacttc ttgtcatttc cttatgcgag gcttggctgg gcaatgacct cagctgacct
caaccaggat gggcacggtg acctcgtggt gggcgcacca ggctacagcc gccccggcca
                                                                     1320
catccacate gggcgcgtgt acctcateta cggcaatgac etgggcetge cacctgttga
                                                                     1380
cctggacctg gacaaggagg cccacaggat ccttgaaggc ttccagccct caggtcggtt
                                                                     1440
tggctcggcc ttggctgtgt tggactttaa cgtggacggc gtgcctgacc tggccgtggg
                                                                     1500
ageteeeteg gtgggeteeg ageageteac etacaaaggt geegtgtatg tetaetttgg
                                                                     1560
ttccaaacaa ggaggaatgt cttcttcccc taacatcacc atttcttgcc aggacatcta
                                                                     1620
ctgtaacttg ggctggactc tcttggctgc agatgtgaat ggagacagtg aacccgatct
                                                                     1680
ggtcatcggc tccccttttg caccaggtgg agggaagcag aagggaattg tggctgcgtt
                                                                     1740
                                                                     1800
ttattctggc cccagcctga gcgacaaaga aaaactgaac gtggaggcag ccaactggac
                                                                     1860
ggtgagaggc gaggaagact tctcctggtt tggatattcc cttcacggtg tcactgtgga
                                                                     1920
caacagaacc ttgctgttgg ttgggagccc gacctggaag aatgccagca ggctgggcca
tttgttacac atccgagatg agaaaaagag ccttgggagg gtgtatggct acttcccacc
                                                                     1980
                                                                     2040
aaacggccaa agctggttta ccatttctgg agacaaggca atggggaaac tgggtacttc
cetttecagt ggccacgtac tgatgaatgg gactetgaaa caagtgetge tggttggage
                                                                     2100
ccctacgtac gatgacgtgt ctaaggtggc attcctgacc gtgaccctac accaaggcgg
                                                                     2160
agccactcgc atgtacgcac tcacatctga cgcacagcct ctgctgctca gcaccttcag
                                                                     2220
eggagaeege egetteteee gatttggtgg egttetgeae ttgagtgaee tggatgatga
                                                                     2280
tggcttagat gaaatcatca tggcagccc cctgaggata gcagatgtaa cctctggact
                                                                     2340
gattggggga gaagacggcc gagtatatgt atataatggc aaagagacca cccttggtga
                                                                     2400
                                                                     2460
catgactggc aaatgcaaat catggataac tccatgtcca gaagaaaagg cccaatatgt
                                                                     2520
attgatttct cctgaagcca gctcaaggtt tgggagctcc ctcatcaccg tgaggtccaa
ggcaaagaac caagtcgtca ttgctgctgg aaggagttct ttgggagccc gactctccgg
                                                                     2580
ggcacttcac gtctatagcc ttggctcaga ttgaagattt cactgcattt ccccactctg
                                                                     2640
cccacctctc tcatgctgaa tcacatccat ggtgagcatt ttgatggaca aagtggcaca
                                                                     2700
                                                                     2760
tccagtggag cggtggtaga tcctgataga catggggctc ctgggagtag agagacacac
taacagccac accctctgga aatctgatac agtaaatata tgactgcacc agaaatatgt
                                                                     2820
gaaatagcag acattetget tactcatgte teettecaca gtttacttee tegeteeett
                                                                     2880
tgcatctaaa cctttcttct ttcccaactt attgcctgta gtcagacctg ctgtacaacc
                                                                     2940
tattteetet teetettgaa tgttttteea gtggetggaa aggteeetet gtggttatet
                                                                     3000
gttagaacag tcccctgtac accaattccc tcccctaaaa acatcccttt tttaaaaaaa
                                                                     3060
gaattggttc cagcccataa agaaagaaca agatccatgc cctttgcagg gacatgggat
                                                                     3120
gggagctgga ggcccattat cccttcataa actattgcag gaacagaaaa cccaaacact
                                                                     3180
cccatattcc tcacttgtaa gtgggagcta gatgagaaca cgtggacaca tagagggaaa
                                                                     3240
caacacacac tggggcctat gagagggcgg aaggtgggag gagggagaga tcaggaaaaa
                                                                     3300
taactaatgg atacttaggg tgatgaaata atctgtgtaa caaaccccca tgacacact
                                                                     3360
ttatgtatgt aacaaaccag cacttcctgc gcatgtaccc ctgaacttaa aagttaaaaa
                                                                     3420
aaagttgaac ttaaaaataa caggattggc ccatgccaat caaagtataa tagaaagcat
                                                                     3480
agtatacaga
                                                                     3490
```

```
<210> 6094
<211> 1761
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1762)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1061) ... (444)
<223> similar to gi5817065 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6094 tttttttttt ttggaaaaca aaaggaaaac ttatttattc ttaggaggtg ggaatgtggg 60 gagtggggca gaaacaggtt gttgcccttg gaagaaggtt ccaaggggca gaggttgggg 120 atgteteagt aaagagggge aggteatgaa tagageetee acceecagea gggggtteet 180 240 ggggcccgcc caagcactgg gctaaaacgt ggaaactggg cattgacaaa gtacagcggg atgtgggcaa ttcggcctgt ggaccagccc acactgagca gggccccttt gttgaaggaa 300 ggatggaaag tgatgagctg gggctgggct cctggctccc cctggataat gccacaggga 360 420 aggageteaa acacaggget gtttegagtg egaaaaagga ggatgaetgg tttaccatee 480 tgtaccettg gettteettt cataageaca gecagaegtt ceceaetggg gteceagaee 540 atggagtgag cetetecece aageetetee teaceatetg gtgtetgtat tgttgtetea 600 gacagatetg ccacaategt tgctgacttt gcacctccaa cgcacccctt tecetcacca 660 caacgttctg gaaaagacag ggagtaaatc agtggctctc ccaatacagt gaacagcagt eggetgecat etgggeteca geagecagte tgacagegec etgatagagt aggecacete 720 tcacaagtcc acatctgggc ctcccagact cgaaagacag ctgaaggagt ggtagccagg 780 840 attttgctgc cgtctgggga ccagagcagg ttggtcaccc cacctcctcg aaaccaggga agggggacac aggtetetgt tgagacatec cataceegga tageageate caegggtgaa 900 gctgagagca gccgccccc actgggggcc caggccaagc tggtaacagg tgtatgccca 960 gggtgagaca gcacttgggc acagccagaa gagggtcggg tagacaagga ggtagggtcc 1020 agggtccaga taagaatgca gctctggcag gccacagcca agacagaggc actaaggggc 1080 ttccaggcca gagacgccac atttcgctgc agccggtgct tcagggaggg gactatggtg 1140 1200 ctgctggcat tatacacacg gactgagtca tctagcaggg ccactgcaaa cttgttggtg 1260 tgggggtgcc atgcaaagac acgcaagcag cagctggacc aatttgtgac ttgggcaaat tcagcgatca gatcttcgct cctgagagac agatggggga acagggaccc atggagggaa 1320 gaggeeeate gaeagagtge eagggeeeag eeggatgeeg tetteaeeea eteaaacaee 1380 tettettetg agtttgeaat tteatttage acceeaaaaa ggeecacate acgeeaaatg 1440 ttgatgcatc tcttccacac ttgctcccgg tgatggatga aggcagttct tgtgccatgg 1500 tccagccttc caggggtctt taggggatcc tttgtcagtt gtaggacagg aagattgatc 1560 cacccagaga gcacatettg ceggttegca ggacgtetge agteggeaaa etectggeeg 1620 gaacggcaca gaccgcactc ccgcaactcg gttcccgggc tagattcgta tgcggacggg 1680 taccgcaagg gacaaacggc gaggcggaac tetetetete tettntntnt etetetetee 1740 tcgtggcgaa ttcctaaagc g 1761

```
<210> 6095
<211> 1273
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (250)...(1041)
<223> similar to gil262338 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6095 ccaaaqccaa qatqqcaqqt acqtcctttt aqaatttaaq qttaqtqaaq ccatctattt 60 eccegacece cetteagtga aaatggtett tegeatetgg etettettt tggaggegtg 120 cttgccagca gtcaaaatgg ctccattccg gaatagattt aataggaagt gaagctgtga 180 eggegaggeg ttgeceggee tatetttget aggegttete agaattagtt etttetgeee 240 acactagaca tggcgcttgc cagcgtgttg gagagaccgc taccggtgaa ccagcgcggg 300 tttttcggac ttgggggtcg tgcagatctg ctggatctag gtccagggag tctcagtgat 360 ggtctgagcc tggccgcgcc aggctggggt gtcccagaaq agccaggaat cqaaatqctt 420 catggaacaa ccaccetgge ettcaagtte egecatggag teatagttge agetgactee 480 agggctacag cgggtgctta cattgcctcc cagacggtga agaaggtgat agagatcaac 540 ccatacetge taggeaceat ggetggggge geageggatt geagettetg ggaaeggetg 600 ttggctcggc aatgtcgaat ctatgagctt cgaaataagg aacgcatctc tgtagcagct 660 geetecaaac tgettgecaa catggtgtat cagtacaaag geatgggget gtecatggge 720 accatgatet gtggctggga taagagagge cetggeetet aactaegtgg acagtgaagg 780 gaaccggatt tcaggggcca ccttctctgt aggttctggc tctgtgtatg catatqqqqt 840 catggatcgg ggctattcct atgacctgga agtggagcag gcctatgatc tggcccgtcg 900 agccatctac caagccacct acagagatgc ctactcagga ggtgcagtca acctctacca 960 cgtgcgggag gatggctgga tccgagtctc cagtgacaat gtggctgatc tacatgagaa 1020 gtatagtggc tctacccct gaaagaggt ggatgcagct gcttgtgttt cttggggtga 1080 ctgtcattgg taatacggac acagtgaccc atcctccatc ctatttatag tgqaaqqqcc 1140 ttcaattgta tcagtacttt tttttaagct ctggcacatt gacctctatg tgttaccagt 1200 cattaatgag ctgctgcaga ggtgactatt tgttttactt tcttggatgt taacattaca 1260 ctactcacta ctc 1273

```
<210> 6096
<211> 5210
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1991)...(5117)
<223> similar to gi3043678 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6096 60 tttttttt ttttttt ttttttttt tttaaccgtc aatctttacc aatttattt atacaaaaca gtagcaatgt 120 agaatatggg aatcgtcttc cgctgccacg cacgcaagtt gtgaacattc caagccaatg 180 240 tatacaattt ggaggggaag gctaaacaat agcatcaacc acgctactga acataggaat ttttcattta aaaagattaa aaattagata gcaatgtctt cttaatattg ctctcgtcat 300 tgaagactga ggaaaaataa aaagtgactt tataagtttt ttaaaaaaaag aggcaatggg 360 420 gaaaaaaaaa agaggctgct acaacactgc catacagtca aaccatcata cttcaatatt tgcatactcg atagcagcat tatttttact gaaccgtgtg caactacatg tagaaacaca 480 tcaaagcaaa atatcatggc agttatcaat caagatccaa aaaggaaaaa aacaaacaaa 540 600 aaaataactc taggatgaac acactataag aacatttatg gagaaagaat cagtatctac attettggae tgttecatte tgeeccaata aaagtgteaa tteaactgte agetgtggat 660 720 ttttggcgga tttgagtttt tccagttctt atgatactgc atgcttggaa caaagggggt 780 cataataaat ccttctacac aatgaacttc ataggcagac agctgaaaat aaatttacta 840 cttgtaaaca cacacaaaa aaaaatacaa gattttttgt atctttaaac aatcagtgct 900 tccaaaagcc cattatcttc tatatcgacc tctctcccct cggtctctgt ctcgatcaca 960 taategetet etttetettt etetateaeg teetetatet egetetetgt etegtetgtt atctctaggg eggtctegct ctegttceeg gtctctttca eggggtctac ttctceggce 1020 actgacaaca gcttgtgtgc gacgaaggaa atcatccacc ctcatatcat aatcatgtac 1080 tegtttatet etgtatettg etteatgtgg taetggatga tgteetgagt aagggggatg 1140 agettgagga ggtggagcat ggtgetgata gtaaggatgg tgtggaggtt gttccattce 1200 tgggtaaggg ggcattcctt gccaaggtgg tggtggtccc atgttatgaa attccctcac 1260 ataatcattg taggacccat ttaaaaaacac atctcggcga actcctgaaa atcgtctgtc 1320 cactteetgg tategtggat cetttaaata eeetggtete tggtgaaaet cagggggata 1380 gtcaatcctt ggtttctttc tgctgttatg aatatcataa tcttctggtc gacgccttcc 1440 cacatecegg actggttete gaegggatgg acgteetegt gategggget gagaatgeat 1500 tettetettg tgacgcattt tatgaatgac etgatacaag teaatacttt categggggg 1560 aaacagaaga caaagctggg ttccacattc aagttcaatt tcctgtccat cacgtccgat 1620 ctttactggt ttatgttcat tccaaggatt ggtgagatga gccgacttag tgaagggtaa 1680 1740 ttcacgcctg caaatccagt caattttaaa gacacctccc agcattttag cactcattcc tgctggaagc acccagtgta taggagatcc tccgtgatgt gattctgaag aaagtcttgc 1800 aaaccettga aattttecae tetetetgae agaaaatate ggaegegtgg ggteggaaga 1860 tectagaggt cecaaggtag etgacttgeg aagetgagge tecageegag ggetecagge 1920 ctctgaccgg cccagcagtg agcgcggctg cccgacgctt cagggccggg agcagggagc 1980 gtgagtegee atggegaege eggegggtet ggagegetgg gtteaggaeg agetgeaete 2040 2100 ggtgttgggg ctgagcgagc ggcacgtcgc ccagtttctg atcggtaccg cacagcgctg 2160 cacctotgcc gaggagttcg tgcagcgcct acgagacact gataccttgg atctcagtgg 2220 gccggcccgg gacttcgccc tgagactctg gaacaaggta ccacgaaagg cagtggtaga aaagccagct cgggcagcag agcgagaggc ccgggccccg gctggagaag aaccgatctt 2280 ataggttact ggaagacagt gaagagagca gtgaggagac tgtgagtagg gctggaagca 2340 2400 gcctccagaa gaaacgtaaa aagcggaaac acctcaggaa gaagcgtgag gaagaagagg 2460 aggaagaggc ttctgagaaa gggaagaaga aaacaggggg gagtaaacag cagacagaga agccagagte ggaagatgag tgggaacgga cagagegtga aegeetteag gacetggagg 2520 agcgtgatgc ctttgctgag cgggttcgac agcgggacaa ggatcggact cgaaatgtcc 2580 tggaacggtc agacaagaag gcttatgaag aggctcagaa gcgcctcaag atggccgagg 2640 aagaccggaa ggccatggtc cctgagctgc ggaagaaatc tcgccgagag tacctggcta 2700 agegggageg agagaagett gaggaeetgg aggeggaget ggetgatgag gagtteettt 2760 ttggggacgt ggagctgagc cggcacgagc ggcaggagct caaatataag cggcgagtgc 2820 gggatetege eegggagtae egggeagetg gggageagga gaagetggag geeaceaate 2880 gctaccacat gcccaaggaa acccgaggac agccagcccg agctgtggat ctagtggagg 2940 aggaatcagg agcccctggg gaggagcagc ggcgctggga ggaggcgcgg cttggggcag 3000 cgtccctgaa gtttggggcc cgagatgctg cctctcagga gcccaagtat caactggtgc 3060 tggaggagga ggagaccatt gagtttgtcc gggccactca gctccagggt gatgaggagc 3120 cgtcagetcc acceaettca actcaggecc agcagaaaga gtccatccag gccgtccgcc 3180 gcagcctccc ggtgttccca tttcgagagg agctcctggc tgctattgca aatcaccaag 3240 tecteateat tgaaggegag acaggeteag ggaagaceae ecagateeeg cagtatetet 3300

```
ttgaggaggg ttatacaaac aagggtatga agattgcctg cacccaaccc cggagagtgg
                                                                 3360
ctgccatgag tgtggccgcc cgagtggccc gggagatggg tgtgaagctt gggaatgagg
                                                                 3420
ttggctacag catccgcttt gaggactgca catcagagcg aactgtcctc cgctacatga
                                                                 3480
cagatgggat gcttctccgg gagttcctct ctgagcctga cctggcgagt tacagcgtgg
                                                                 3540
                                                                 3600
tgatggtgga tgaggcacac gaaaggaccc tacacacaga cattctcttt ggattgatca
aggatgttgc tcgcttccga cctgagctca aggtcctggt ggcttcagcc acaatggaca
                                                                 3660
etgecegttt ttecacette tttgatgacg eccetgtgtt tegaateece ggacgcaggt
                                                                 3720
ttcctgtgga catcttctac accaaggctc cagaggctga ctacttggaa gcttgtgtag
                                                                 3780
tatctgtgtt gcagatccat gtgacccagc cccctgggga tatcctggtg ttcctgacag
                                                                 3840
                                                                 3900
gacaggagga gattgaggct gcctgtgaga tgctccagga tcgctgccgc cgcctgggct
ccaaaatccg ggageteetg gtgetgeeca tttatgeeaa tetgeeetet gacatgeagg
                                                                 3960
cccgtatctt ccagcccaca ccacctgggg cacgaaaggt ggttgtggca acgaacattg
                                                                 4020
ctgagacatc actcaccatt gagggcatca tttatgtgct ggatccaggg ttctgtaagc
                                                                 4080
agaagagcta caacccccgc acaggcatgg aatcgctcac tgtcacaccc tgcagcaagg
                                                                 4140
ceteagecaa teagegaget ggeagggeag gtegggtgge tgeagggaag tgetteegee
                                                                 4200
tgtataccgc ctgggcctat cagcacgagc ttgaggaaac cacagtgcct gagatccaga
                                                                 4260
                                                                 4320
ggaccagett gggcaatgte gtgttgetge teaagagett agggateeat gacctaatge
actitigatit cotggaccot coaccatatg agacactgot gotggottitg gagcagotgt
                                                                 4380
atgetetggg ageceteaac cacettgggg ageteaceae gtetggtega aagatggeag
                                                                 4440
agctgccggt ggaccccatg ctgtccaaaa tgatcttagc ctctgagaag tacagctgtt
                                                                 4500
cagaggagat cotgacagtg gotgocatgo tototgtoaa caactocato ttotacogac
                                                                 4560
caaaggacaa ggtcgtccat gctgacaatg cccgtgtcaa cttctttctc cctggcggtg
                                                                 4620
accacctggt tetgetaaat gtttacacac agtgggetga gagtggttac tetteccagt
                                                                 4680
ggtgctatga gaactttgta cagttcagat cgatgcgccg agcccgggat gtgcgggaac
                                                                 4740
agctggaagg gctcttggaa cgtgtggaag ttggtctcag ttcctgccag ggggactata
                                                                 4800
4860
gtggctaccg cacagtgaaa cagcagcaga cagtetteat teateccaae teeteeetet
                                                                 4920
ttgagcaaca gccacgctgg ctgctctacc acgaacttgt cttgaccacc aaagagttca
                                                                 4980
tgagacaggt actggagatt gagagcagtt ggcttctgga ggtggctccc cattattata
                                                                 5040
aggccaagga gctagaagat ccccatgcta agaaaatgcc caaaaaaata ggcaaaacac
                                                                 5100
gagaagaget agggtaagag aaggaegtaa acagaacetg acaccagete etttteette
                                                                 5160
5210
```

```
<210> 6097
<211> 668
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (107)...(589)
<223> similar to gi563324 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6097

cggcacgagc ggcacgaggg attgttgtgt ccactaaccg gactcagaag ggacttccct 60
gctcggctgg ctttcggttt ctctgctcac ctccggataa atcacggggt ctcccggcc 120
gctcatggcg cctcccgtcc gtctcgagcg tccctttcct tcccggcgct ttcctgggtt 180
gcttctggcg gccctggtgt tgctgctgtc ctccttctcc gatcaatgca atgtcccgga 240
atggcttcca tttgccaggc ctaccaacct aactgatgac tttgagtttc ccattgggac 300
```

```
atatetgaac tatgaatgee geeetggtta tteeggaaga eegtttteta teatetgeet 360 aaaaaaactea gtetggacaa gtgetaagga caagtgeaaa egtaaateat gtegtaatee 420 teeagateet gtgaatggea tggeacatgt gateaaagae ateeagtteg gateecaaat 480 taaatattet tgteetaaag gatacegaet cattggttee tegtetgeea eatgeateat 540 eteaggeaac aetgteattt gggataataa aacacetgtt tgtgacagtg agttgaaata 600 tgcatteeta tttettaaaa agatacatte taatttttet etggaataat aaaaatettt tttegaaa
```

```
<210> 6098
<211> 6730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (369)...(6289)
<223> similar to gi36124 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6098

tttcgtgaag aaggcggctc ccggaagggg gagagacaaa ctgccgtaac ctctgccgtt 60 caggaacccg gttacttatt tattcgttac cctttttctt cttcctcccc caaaaacctt 120 ttccttttcc cttcttttt tttccttttt gggagctgaa aaatttccgg taagggaaag 180 aagggeteet ttegeteett attteeeege eteetteeet teeeeaeett eeeeteetee 240 ggctttttcc tcccaactcg gggaggtcct tcccggtggc cgccctgacg aggtctgagc 300 acctaggegg aggeggegea ggetttttgt agtgaggttt gegeetgege agegegeetg 360 cctccgccat gcacgggggt ggccccccct cgggggacag cgcatgcccg ctgcgcacca 420 tcaagagagt ccagttcgga gtcctgagtc cggatgaact gaagcgaatg tctgtgacgg 480 agggtggcat caaataccca gagacgactg agggaggccg ccccaagctt ggggggctga 540 tggacccgag gcaggggtg attgagcgga ctggccgctg ccaaacatgt gcaggaaaca 600 tgacagagtg tcctggccac tttggccaca ttgaactggc caagcctgtg tttcacgtgg 660 getteetggt gaagacaatg aaagttttge getgtgtetg ettettetge tecaaactge 720 ttgtggactc taacaaccca aagatcaagg atatcctggc taagtccaag ggacagccca 780 agaagcggct cacacatgtc tacgaccttt gcaagggcaa aaacatatgc gagggtgggg 840 aggagatgga caacaagttc ggtgtggaac aacctgaggg tgacgaggat ctqaccaaaq 900 aaaagggcca tggtggctgt gggcggtacc agcccaggat ccggcgttct ggcctagagc 960 tgtatgcgga atggaagcac gttaatgagg actctcagga gaagaagatc ctgctgagtc 1020 cagagcgagt gcatgagatc ttcaaacgca tctcagatga ggagtgtttt gtgctgggca 1080 tggagccccg ctatgcacgg ccagagtgga tgattgtcac agtgctgcct gtgccccgc 1140

teteegtgeg geetgetgtt gtgatgeagg getetgeeeg taaceaggat gacetgaete

acaaactggc tgacatcgtg aagatcaaca atcagctgcg gcgcaatgag cagaacggcg

cageggeeca tgteattgea gaggatgtga ageteeteea gtteeatgtg geeaceatgg

tggacaacga getgeetgge ttgeecegtg ceatgeagaa gtetgggegt eeecteaagt

ccctaaagca gtggttaaag ggcaaggaag gccgggtgcg agggaacttg atgggcaaaa

gagtggactt ctcgggccgc actgtcatca ccgccgaccc caacctctcc attgaccagg

ttggcgtgcc ccgctccatt gctgccaaca tgacctttgc ggagattgtc accccttca

acattgacag acttcaagaa ctagtgcgca gggggaacag ccagtaccca ggcgccaagt

acatcatccg agacaatggt gatcgcattg acttgcgttt ccaccccaag cccagtgacc

ttcacctgca gaccggctat aaggtgaaac ggcacatgtg tgatggggac attgttatct

tcaaccggca gccaactctg cacaaaatgt ccatgatggg gcatcgggtc cgcattctcc

1200

1260

1320

1380

1440

1500

1560

1620

1680

1740

1800

```
catggtctac ctttcgcttg aatcttagcg tgacaactcc gtacaatgca gactttgacg
                                                                     1860
                                                                     1920
gggatgagat gaacttgcac ctgccacagt ctctggagac gcgagcagag atccaggagc
tggccatggt tcctcgcatg attgtcaccc cccagagcaa tcggcctgtc atgggtattg
                                                                     1980
                                                                     2040
tgcaggacac actcacagca gtgcgcaaat tcaccaagag agacgtcttc ctggagcggg
gtgaagtgat gaacctcctg atgttcctgt cgacgtggga tgggaaggtc ccacagccgg
                                                                     2100
ccatcctaaa gccccggccc ctgtggacag gcaagcaaat cttctccctc atcatacctg
                                                                     2160
gteacateaa ttgtateegt acceacagea cecateeega tgatgaagae agtggeeett
                                                                     2220
acaagcacat ctctcctggg gacaccaagg tggtggtgga gaatggggag ctgatcatgg
                                                                     2280
                                                                     2340
gcatcetgtg taagaagtet etgggcaegt cagetggete cetggteeae ateteetaee
tagagatggg teatgacate actegeetet tetaeteeaa catteagaet gteattaaca
                                                                     2400
actggctcct catcgagggt catactattg gcattggggg ctccattgct gattctaaga
                                                                     2460
cttaccagga cattcagaac actattaaga aggccaagca ggacgtaata gaggtcatcg
                                                                     2520
agaaggcaca caacaatgag ctggagccca ccccagggaa cactctgcgg cagacgtttg
                                                                     2580
agaatcaggt gaaccgcatt cttaacgatg cccgagacaa gactggctcc tctgctcaga
                                                                     2640
aatccctgtc tgaatacaac aacttcaagt ctatggtcgt gtccggagct aaaggttcca
                                                                     2700
agattaacat ctcccaggtc attgctgtcg ttggacagca gaacgtcgag ggcaaqcqga
                                                                     2760
ttccatttgg cttcaagcac cggactctgc ctcacttcat caaggatgac tacgggcctg
                                                                     2820
agageegtgg etttgtggag aacteetace tageeggeet cacacceaet gagttetttt
                                                                     2880
tecaegecat ggggggtegt gaggggetea ttgacaegge tgtcaagaet getgagaetg
                                                                     2940
gatacatcca geggeggetg atcaagteca tggagteagt gatggtgaag tacgaegega
                                                                     3000
ctgtgcggaa ctccatcaac caggtggtgc agctgcgcta cggcgaagac ggcctggcag
                                                                     3060
gcgagagcgt tgagttccag aacctggcta cgcttaagcc ttccaacaag gcttttgaga
                                                                     3120
agaagttccg ctttgattat accaatgaga gggccctgcg gcgcactctg caggaggacc
                                                                     3180
tggtgaagga cgtgctgagc aacgcacaca tccaaaacga gttggagcgg gaatttgagc
                                                                     3240
ggatgcggga ggatcgggag gtgctcaggg tcatcttccc aactggagac agcaaggtcg
                                                                     3300
tecteccety taacetycty cygatyatet ggaatyctca gaaaatette cacatcaace
                                                                     3360
cacgcettee etecgacety caceceatea aagtggtgga gggagteaag gaattgagea
                                                                     3420
agaagetggt gattgtgaat ggggatgace cactaagteg acaggeecag gaaaatgeea
                                                                     3480
egetgetett caacatecae etgeggteca egttgtgtte ecegeegeat qqcaqaqqaq
                                                                     3540
tgttcggctc agtggggagg ccttcgactg gctgcttggg gagattgagt ccaagttcaa
                                                                     3600
ccaagccatt gcgcatcccg gggaaatggt gggggctctg gctgcgcagt cccttggaga
                                                                     3660
acctgccacc cagatgacct tgaatacctt ccactatgct ggtgtgtctg ccaagaatgt
                                                                     3720
gacgctgggt gtgccccgac ttaaggagct catcaacatt tccaagaagc caaagactcc
                                                                     3780
ttcgcttact gtcttcctgt tgggccagtc cgctcgagat gctgagagag ccaaggatat
                                                                     3840
tctgtgccgt ctggagcata caacgttgag gaaggtgact gccaacacag ccatctacta
                                                                     3900
tgaccccaac ccccagagca cggtggtggc agaggatcag gaatgggtga atgtctacta
                                                                     3960
tgaaatgcct gactttgatg tggcccgaat ctccccctgg ctgttgcggg tggagctgga
                                                                     4020
teggaageae atgaetgaee ggaageteae catggageag attgetgaaa agateaatge
                                                                     4080
tggttttggt gacgacttga actgcatctt taatgatgac aatgcagaga agctggtgct
                                                                     4140
ccgtattcgc atcatgaaca gcgatgagaa caagatgcaa gaggaggaag aggtggtgga
                                                                     4200
caagatggat gatgatgtct tcctgcgctg catcgagtcc aacatgctga cagatatgac
                                                                     4260
cctgcagggc atcgagcaga tcagcaaggt gtacatgcac ttgccacaga cagacaacaa
                                                                     4320
gaagaagatc atcatcacgg aggatgggga attcaaggcc ctgcaggagt ggatcctgga
                                                                     4380
gacggacggc gtgagcttga tgcgggtgct gagtgagaag gacgtggacc ccgtacgcac
                                                                     4440
cacgtccaat gacattgtgg agatcttcac ggtgctgggc attgaagccg tgcggaaggc
                                                                     4500
cctggagcgg gagctgtacc acgtcatctc ctttgatggc tcctatgtca attaccgaca
                                                                     4560
cttggctctc ttgtgtgata ccatgacctg tcgtggccac ttgatggcca tcacccgaca
                                                                     4620
eggagteaac egecaggaca caggaccact catgaagtgt teetttgagg aaacggtgga
                                                                     4680
cgtgcttatg gaagcagccg cacacggtga gagtgacccc atgaaggggg tctctgagaa
                                                                     4740
tatcatgctg ggccagctgg ctccggccgg cactggctgc tttgacctcc tgcttgatgc
                                                                     4800
agagaagtgc aagtatggca tggagatccc caccaatatc cccggcctgg gggctgctgg
                                                                     4860
acceacegge atgiteting giteageace cagteceatg ggiggaatet etectgeeat
                                                                     4920
gacacettgg aaccagggtg caacecetge ctatggegee tggteeecea gtgttgggag
                                                                     4980
tggaatgacc ccaggggcag ccggcttctc tcccagtgct gcgtcagatg ccagcggctt
                                                                     5040
cageceaggt tacteceetg cetggtetee caeaceeggg eteceegggg gteeceaggt
                                                                     5100
teceteaage ecetacatee etteaceagg tggegeeatg teteceaget actegeeaae
                                                                     5160
gtcacctgcc ttacgagccc cgctctcctg ggggctacac accccagagt ccctcttatt
                                                                     5220
```

```
ccccacttc accetectac teccetacet etecatecta ttetecaace aqteccaact
                                                                     5280
atagteceae ateacecage tattegecaa egteacecag etacteaceg acetetecea
                                                                     5340
getactcacc cacctetece agetactege ecacetetee cagetacteg eccacetete
                                                                     5400
ccagctactc acceacttcc cctagctact cgcccacttc ccctagctac tcgccaacqt
                                                                     5460
cteccageta etegeegaca teteccaget actegeeaac tteacceage tatteteeca
                                                                     5520
cttctcccag ctactcacct acctctccaa cctactcgcc cacctccccc agctactcac
                                                                     5580
ccacttcccc aagttactca cccaccagcc cgaactattc tccaaccagt cccaattaca
                                                                     5640
ccccaacatc acccagctac agcccgacat cacccagcta ttcccctact agtcccaact
                                                                     5700
acacacctac cagocctaac tacagoccaa cototocaag ctactotoca acatoaccca
                                                                     5760
getattecce gaceteacea agttactece ettecagece aegatacaca ecacagtete
                                                                     5820
caacctatac cccaagctca cccagctaca gcccaagctc gcccagctac agcccaacct
                                                                     5880
cacccaagta caccccaacc agtccttctt acagtcccag ctccccagag tataccccaa
                                                                     5940
cctctcccaa qtactcacct accaqtccca aatattcacc cacctctccc aaqtactcqc
                                                                     6000
ctaccagtcc cacctattca cccaccaccc caaaatactc cccaacatct cctacttatt
                                                                     6060
ccccaactt tccagtctac accccaact ctcccaagta ctcacctact agccccactt
                                                                     6120
actegeceae tteececaag tactegecea ceagececae etactegece acetececa
                                                                     6180
aaggeteaac etacteteec aetteecetg gttactegee caccageece aectacagte
                                                                     6240
tcacaagccc ggctatcagc ccggatgaca gtgacgagga gaactgaggg cacgtggggt
                                                                     6300
geggeagegg getagggeee agggeagett geeegtgetg etgtgeagtt ettgeeteee
                                                                     6360
teacggggcg teacceccag eccagetecg ttgtacataa atgeettgtg geagagetee
                                                                     6420
cggtgaactt ctggatcccg tttctgatgc agactcttgt cttgttctcc acttgtgctg
                                                                     6480
ttagaactca ctggcccagt ggtgttctca ctcctacccc acccaccccc tgcctgtccc
                                                                     6540
caaattgaag atcetteett geetgtgget tgatgegggg egggtaaagg gtattttaae
                                                                     6600
ttaggggtag ttcctgctgt gagtggttac agctgatcct cgggaagaac aaagctaaag
                                                                     6660
ctgccttttg tctgttattt tatttttttg aagtttaaat aaagtttact aattttgacc
                                                                     6720
aaaaaaaaa
                                                                     6730
```

```
<210> 6099
<211> 1240
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (456)...(746)
<223> similar to gi3242079 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6099
ctgatttagt atgctaacaa cacgttggca cagctccaca agtgtaaagg ccgtgtatgt
                                                                       60
cctgtttgcc actctgtctc caaggcctag cacaatagga actaacagag agtgggaact
                                                                      120
cagtaaatat ttgttgagca aatccatgta ttcaaactgg gtaactctct ttgtctqaaq
                                                                      180
catgaattgg aagggtaata tgcttgtttc tctttctttt acagttgtca aatttaaaag
                                                                      240
ttttgaatca ctccccaatg tctgatgcct ctgtcaattt tgactacaaa tctccatccc
                                                                      300
catttgactg cagcactgat caagaagaga aaattgaaga tgttgctagt cactgtctgc
                                                                      360
ctcagaagga cctgtatact gctgaagagg aagctgctac cctttttcct aggaaaatga
                                                                      420
catcccataa tgggatggag gacagtggag gaggaggtac tggagtgaag aagaaacgga
                                                                      480
agaaaaagga gccaggagac caagagggtg cagcaaaggg aagcaaggac agagagccca
                                                                      540
agccaaagag gaaacgagaa ccgaaagagc caaaggaacc cagaaaggcc aaggagccga
                                                                      600
agaaggccaa ggagcacaag gagccgaagc aaaaagatgg ggcaaagaag gcacggaagc
                                                                      660
```

```
720
ccaggacgaa ttccaggaag gccaatatgg agcaaggacc aacccctgtg gataaaaaga
                                                           780
agaatggaat aaggaaaagt gaaactactg aggagagttt atagctggat cagggtctga
                                                          840
                                                          900
cgaacccatc tttgcggagt cctgaggagt ccactgagtc tacagacagc cagaaacgac
                                                          960
gctcgggaag gcaagtaaag cgcagaaaat acaatgagga cctggacttc aaagtggtgg
                                                          1020
atgatgatgg ggaaacaatt gctgttcttg gagctggtcg aacatctgca ctctcagcct
                                                          1080
ctacactggc ctggcaggcg gaggagcctc cagaagatga tgccaacatc attgagaaga
tectggeate taagactgte caggaggtte ceccaggaga cecceegtte gaettggage
                                                          1140
tgttttacgt taagtataaa aatttgtacg tctatttaaa ggattctctg gatttgggtt
                                                          1200
1240
```

```
<210> 6100
<211> 7431
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (392)...(5946)
<223> similar to gi5456754 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6100 geggtgeete tgagageege egecaceteg teeeteagtt eeeggeagae ageegeeegg 60 geeggegtee eteacegeea eeagggeegg agtgaegagt gagaggggeg geegggaege 120 gacccceggg ccaggagaag cggaggcccg acggcggcgg ccctccgagg tacggcttct 180 tggggggggc gaggacctcg acgcccttcg ccgacaccgc ggctggtccc gctcgcccgc 240 300 ceetteetga teetgeeget geeeteeaeg ceteeaatee eccaceteea ecceetetee tttetetett etetteette eteteeteet eeteeetee ageegetggg ageegegggt 360 eggaegagee geegeeteet tetetgegte catgtatgag gggaagaaga egaagaacat 420 gttcctgacc cgggctctgg agaagatatt ggccgacaag gaagtgaaga aggcgcatca 480 ctcccagctg cgcaaagctt gcgaggtggc gttagaggaa ataaaagcgg aaactgaaaa 540 acagagteet ceteatggag aagcaaaage tggateaage accetteeac cagtgaaate 600 aaagacaaat tttattgaag cagacaagta cttcttgcct tttgagttgg catgccagtc 660 caaatgtcct cgcatagtta gtacatctct agattgctta cagaaactta ttgcttatgg 720 gcacttgact ggcaatgctc cagatagtac aacaccaggc aaaaaattaa ttgatagaat 780 tattgaacca atatgtggct gctttcaggg ccctcagaca gatgaaggag ttcagctgca 840 gataataaag getttaetta etgeagtaae ateaeaaeae atagaaatte atgaagggae 900 tgtactgcaa gctgtgagaa catgttacaa tatctactta gcaagcaaaa atctcatcaa 960 tcagacaaca gccaaagcta ctctcactca gatgctaaat gttatctttg cacgcatgga 1020 aaaccaagca ttacaggaag caaaacaaat ggaaaaagaa aggcatcggc agcatcatca 1080 tctgttaccg tctccagtaa gccatcacga gcctgaatca cctcaactta gatatttgcc 1140 acctcagact gttgatcata tatcccaaga acacgaaggg gaccttgacc tccatacaaa 1200 tgatgtagat aaaagtette aggatgacae agageetgaa aatggatetg atattteeag 1260 tgcagaaaat gaacagactg aagctgatca ggcaactgca gctgaaacat tatctaaaaa 1320 tgaagtgtta tatgacggag aaaaccatga ttgtgaggaa aagccacaag acattgtaca 1380 gaacattgta gaagaaatgg tgaacattgt tgttggagat atgggagaag ggactactat 1440 aaatgcaagt gcagatggca acattggaac tatagaggat ggtagtgaca gtgaaaatat 1500 tcaagcaaat ggaattccag gaacaccaat ttctgttgca tatacaccat ccttacctga 1560 tgatagattg tcagtctctt ccaatgatac tcaggaatct ggaaattctt caggaccttc 1620

```
acctggtgct aagttttccc acattttaca aaaggatgcc tttctagtat tcaggtcatt
                                                                     1680
gtgtaaactg tcaatgaaac cactgtcaga tggaccacca gatccaaagt ctcatgaact
                                                                     1740
acgatccaag attettteat tgeagttact tetatecatt etgeagaatg caggacetat
                                                                     1800
tttcaggaca aatgagatgt ttattaatgc tattaagcag tatctttgtg ttgcactctc
                                                                     1860
aaaaaatgga gtctcatctg ttccagaggt ttttgagctt tctctttcta tatttcttac
                                                                     1920
tttgttgtca aatttcaaga cacatctgaa gatgcaaatt gaggtgttct ttaaagaaat
                                                                     1980
tttcttatac attttggaaa cttctaccag ctcatttgat cacaaatgga tggttattca
                                                                     2040
gacactgacg aggatttgtg cagatgctca gagtgtagtg gatatttatg taaactatga
                                                                     2100
ctgtgactta aatgcagcca atatatttga aagactagta aatgatctat caaaaattgc
                                                                     2160
tcaaggaagg ggcagtcaag aacttggtat gagtaatgtt caggaattga gcctgaggaa
                                                                     2220
aaaaggttta gaatgcttag tgtcgatttt gaagtgtatg gttgaatgga gtaaggatca
                                                                     2280
gtatgtgaat cccaactccc agacaactct tggtcaggaa aaaccctcag agcaagagat
                                                                     2340
gagtgaaatc aaacaccctg agacaataaa cagatacgga agtttaaatt ccctggagtc
                                                                     2400
aacatcatca tcaggaatag gcagctacag tacacagatg tctggcactg ataatccaga
                                                                     2460
acaatttgag gtcctaaagc aacaaaaaa aataatagaa caagggatag atttatttaa
                                                                     2520
taagaaacca aagagaggaa tacagtacct ccaagaacaa gggatgcttg gcaccacacc
                                                                     2580
tgaagatatt gcccaattct tacatcaaga ggaaagatta gactctactc aagtgggtga
                                                                     2640
ggttcccggg gggataatgg ataaatttaa ccaaagaagt catgtatgca tatgtggacc
                                                                     2700
aacatgactt ttcaggaaaa gacttcgttt cagcccttcg tatgtttcta gaaggatttc
                                                                     2760
gtcttccagg ggaagctcag aaaatcgatc gattaatgga aaaatttgct gcaagatacc
                                                                     2820
tagaatgcaa ccaaggacaa actctctttg ctagtgcgga tacagcttat gttttggctt
                                                                     2880
attcaattat catgttgacc acagaccttc acagtccaca ggtgaaaaat aaaatgacaa
                                                                     2940
aggaacaata cattaagatg aatagaggta tcaatgacag taaagacctt cctgaagagt
                                                                     3000
atctatcagc catctataat gaaatagctg ggaaaaagat atcaatgaaa gaaacaaaag
                                                                     3060
aactaacaat ccctacaaaa tcaagtaaac agaatgtagc cagtgaaaaa caaagaagac
                                                                     3120
ttctgtataa cttagaaatg gagcagatgg ccaagacagc taaagcactc atggaggccg
                                                                     3180
tgagccatgt tcaggcaccc tttacaagtg caacacattt ggagcatgtg aggcccatgt
                                                                     3240
ttaagttggc ttggacgcct tttctggctg cattcagtgt gggtctacaa gattgtgatg
                                                                     3300
atactgaagt agcctctctt tgcctggaag gtataagatg tgcaatcaga attgcatgca
                                                                     3360
ttttcagcat tcagctggag agagatgcat atgtccaggc actagcaaga tttaccttac
                                                                     3420
tcacagtgag ttccggtatt actgaaatga aacagaagaa cattgacaca ataaaaacac
                                                                     3480
ttatcacagt ggctcataca gatggaaatt atttaggaaa ttcatggcat gagattctga
                                                                     3540
agtgcatcag tcagttggag ctggcacagc ttataggaac tggagtgaaa cctcgataca
                                                                     3600
tttctggaac agtgcgaggc agagaaggat ctcttactgg aacaaaagat caggctcctg
                                                                     3660
atgaatttgt gggtttaggg ctagttggag gaaatgtgga ctggaaacag atagcaagta
                                                                     3720
ttcaggaatc cattggagaa accagttctc agagtgttgt tgttgctgta gatagaatat
                                                                     3780
tcacaggatc tacaaggcta gatggaaatg ccattgtgga ttttgtccgt tggctctgtg
                                                                     3840
ctgtgtctat ggatgaatta ctttccacga cacacccaag aatgtttagt ctacaaaaaa
                                                                     3900
tagtagaaat atcatattac aacatgggaa gaataagatt acagtggtct cgaatttggg
                                                                     3960
aagttattgg agatcatttt aataaggttg ggtgtaatcc taatgaagat gtagctattt
                                                                     4020
ttgcagtaga ctccttgagg cagttgtcaa tgaagttctt agagaaaggg gagcttgcta
                                                                     4080
acttcagatt ccagaaggat ttcttaagac cttttgaaca tataatgaaa cggaacaggt
                                                                     4140
ctccaacaat tcgagatatg gttgtacggt gtatagcaca gatggttaat tctcaagctg
                                                                     4200
ctaacattcg atctggatgg aagaacattt tctctgtatt tcatctagct gcatctgatc
                                                                     4260
aagatgaaag catagtggaa cttgcattcc aaacaaccgg gcacattgtc acccttgtat
                                                                     4320
ttgaaaaaca ctttccagcg accattgatt ctttccagga tgcagtgaag tgtttgtctg
                                                                     4380
aatttgcgtg caatgcagct ttcccagaca caagtatgga agcaattcga cttattcgcc
                                                                     4440
attgtgcaaa atatgtgtct gatagacctc aggctttcaa ggaatacaca agcgatgata
                                                                     4500
tgaacgtagc acctgaagac agggtgtggg tgagaggatg gttcccaatt ctctttgagt
                                                                     4560
tatcctgtat catcaataga tgcaaattag atgtaagaac caggggttta acagtaatgt
                                                                     4620
ttgaaataat gaaaacatat ggccacactt atgagaaaca ctggtggcag gatttattta
                                                                     4680
gaattgtttt cagaatcttt gacaatatga aattgccaga acaacagaca gagaaagctg
                                                                     4740
aatggatgac aacaacttgc aatcatgcac tttatgcaat ctgtgatgta ttcactcagt
                                                                     4800
atttagaagt actcagtgat gtacttttgg atgacatttt tgctcagctc tactggtgtg
                                                                     4860
tgcagcaaga caatgagcag ttagcgcgat ctggtacaaa ctgtttagag aatgttgtta
                                                                     4920
ttctgaatgg tgaaaaattt accctagaaa tctgggataa aacttgcaac tgcacactgg
                                                                     4980
atatetteaa aaccacaate ecacatgege tgttgacetg gegacecaat tetggagaaa
                                                                     5040
```

```
ctgcccccc acctccatct cctgtaagtg aaaagccatt ggatacaata tcacagaagt
                                                                     5100
ctgtagatat tcatgattct attcaaccaa ggtctgtgga taacagacca caagcaccac
                                                                     5160
tggtttctgc gtctgctgtt aatgaagaag tcagcaaaat taaatctaca gcaaaatttc
                                                                     5220
cagaacaaaa attgtttgct gccctgttga ttaaatgtgt tgtgcagctg gaactcatcc
                                                                     5280
agactatega caacattgte ttetteecag ceacaagtaa gaaagaagat geagaaaact
                                                                     5340
tagetgeage acagagagat geggtggact ttgatgtteg egttgataet caagaceaag
                                                                     5400
gaatgtaccg ctttttaaca tcacaacaac tttttaagct actggactgc ttattagagt
                                                                     5460
cacatagatt tgcaaaagcg tttaattcca acaacgaaca gaggactgcc ctgtggaaag
                                                                     5520
caggattcaa aggcaaatcc aagcccaacc ttctgaagca ggagaccagc agcctggcct
                                                                     5580
gtgggetgeg eattetette eggatgtaea tggatgagag eegegttagt geetgggagg
                                                                     5640
aggtccagca gaggcttttg aatgtctgca gtgaagcact aagttacttc ctcactctaa
                                                                     5700
catcagaaag tcatcgagaa gcctggacta acttactgct tttgtttcta actaaagttc
                                                                     5760
taaagataag tgataatagg tttaaagctc atgcatcatt ctactaccct ctcttatgtg
                                                                     5820
aaattatgca atttgacttg attcctgaac ttcgtgctgt tcttagaaga ttttttctgc
                                                                     5880
gaatcggagt agtttttcag atatcacaac cacctgaaca ggaacttgga ataaacaagc
                                                                     5940
aatgatggga acttaatatt tttgttggca tttacatccc tctgctcttt aaaaggacgc
                                                                     6000
tggagetgag gttteetace tgaaaaatga tttetetgga ttgeagtgte tgagttaetg
                                                                     6060
gtaaagatgc ttagaagtct tactcaaact tgcaacactc cagtcccttt tagtgctggt
                                                                     6120
ggattttgtg tgttatattg gcctcatgtt gagcagaaag cctgtttaaa cagtgtcagc
                                                                     6180
tcatgctcac gggtccttcc ctgtcttcca cggcaggaaa agccccacgt ttttggcagg
                                                                     6240
tgtggaagtg aaacttaccc aaagaactat agatgtaaag attgaacttc tacaagaagt
                                                                     6300
acaactcagg agagctgtat tttgaaggat aaaatgttta taattgggga gtggggagag
                                                                     6360
aagaagaaat tattgttcat ggtaaaagat atttagcaac tatggtattc ttattctgaa
                                                                     6420
gatttttgca cactcaggct atctgagata ctggtaatca tcctgtgaaa aatgtacaga
                                                                     6480
gatgcaggtc tgtaatataa aaatcttaaa acattatata gttcttcctq cactqttttc
                                                                     6540
tttattttct tattcatttg ctaaataccc ataatatttt gtcaaatgca ctaaacattt
                                                                     6600
gggtggaact ttctttttta ttttataggg atttttagtt ttgccctttt tggtaggtgg
                                                                     6660
tgattttgag gctgtaacat gcccagaagc tgttgtggcc gacacttcaa caatagggaa
                                                                     6720
aaaaaggtag aaaatatccc tactgacagt aactacctgt cacatatttc tcttaggact
                                                                     6780
tttaaagatg agccattaaa atagaatgat cctttatgga ccaaaacttg aatcactgca
                                                                     6840
aaatgaatcc agattgctgt cattttcttt tcttttgggt ggtggggctt gatgtagatt
                                                                     6900
ttactctatg tacagaattt aacgttgaat atattaaaat aacaaatctg gcatggtttg
                                                                     6960
cggaggttag atttactgga aatgtattca tactgtgaat tgtgcctctg atgqttaaaa
                                                                     7020
gacaagattg tcaagcattc cgtattaaca gtgggatgta gaaaattttt tcaqatqqqa
                                                                     7080
caaaatgtat atggtacaga tgtaaagttt tctatgtaaa aaattctgta caactttctg
                                                                     7140
tacaatattg attcccatct ggcatattct aatcaggtta taggtcaata aagtttttga
                                                                     7200
attatttcat cagtgcaatc aaaacctgta taacccaccc ccatgtttca ttgattctqq
                                                                     7260
tctattaagg ctgaacaact atggaaaaga cattttcagc cagaactaca aattcaatat
                                                                     7320
tgtttggttc tggtattttc tttccagctt ctagcattag atcctcctta cactqtactt
                                                                     7380
accataggat acttatttt aaggcaattt ttaaaatttt tatttatctt q
                                                                     7431
```

```
<210> 6101
<211> 1704
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1679)...(139)
<223> similar to gi5763727 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6101
ttttttttta tacaaaaaa tttttatggg agtacagttt caaatttaga gcttccacgc
                                                                       60
ttacaaatgt gattggatat ttaggataca taatttattc ttaaaataca caacttatat
                                                                      120
acagatatta aaaactcagt ctccaaaatg ctcaataaag atgtctgggt gacacttata
                                                                      180
gaattgacct agcaaatttt ttcttctctt tggcagaaag ttttgaatcc tcatcaagag
                                                                      240
tttttagtaa attcaacagc tcatctttgg ttgtcttctc tgtattgttg gaatagtcac
                                                                      300
gttgatcaat tetetggcaa taaatatate etgeatetet atttggatet etteegttet
                                                                      360
gtatggccat aaggcttaac cacttacaat tttatgtgag agttccagga atcttaaaaa
                                                                      420
catctttctg atgatccatt taaaaagagt accagaagat ctgttttgcc tttggataaa
                                                                      480
tttttattgt caacaatagc ttttgagaat atcettttca caaccattcg gttgtcactt
                                                                      540
tctttctgta atttaaactc agaaggattt gctgcaacag ccatgaaata cagtagtctt
                                                                      600
ctaaattctt ctctattttg gaaatctaaa agctttagaa ggagctgggt agcttctaaa
                                                                      660
gctatttccg tcttcccatt cactaagagt tctgcaattc cattatgaac qtcaqataag
                                                                     720
tgatttaaca gaggttccct actactgtaa tatctgccaa tggcatcaaa cagaagttct
                                                                      780
ttcactaagt ctgttcggtc tggttgctca ggaaagcttc tgcttatttc caccaccatt
                                                                     840
tggtctggaa ggtattctga acagtcaatt gctgccgaga gccactcatc ttcctgagag
                                                                     900
tcactataag ccttgagaat ccctcgatcc agatagttac tgctgttgac catggtggac
                                                                     960
tgcctcttag gttgaggaat tttaggtaca gcctcttgct gtttcagtaa ggagtcaaga
                                                                     1020
agtggaaggt ctacaagttg tagtagacgc ccaattgttt cttcttgcca cacttcatta
                                                                     1080
ataacttgtg gagacaaggt tgcagagata tttacatgag gggagttggc aggctttaaa
                                                                     1140
ctcagatttt cccacaggtc ctctaaactg gctgatctga tatcggatga cttaaataat
                                                                    1200
gcatctgcat acctggcagg tgaatatagt ttgttctctt tgcctaactg actgtcttgg
                                                                    1260
ttaggtattg tggtgaatct ataaaggctg caactactat cttcaaatgt aggttttttg
                                                                    1320
tcttttccaa agactttggt tggaactgct tcaaatactt tgtagtccat aagcgcttga
                                                                    1380
cacactetea ceaetttgge tegaggaata tetacateae caaaataett attetgaatt
                                                                    1440
aggtgagaaa aaatgacatc cacagettet gaaccaacaa agcagteatt atgtegtttt
                                                                    1500
aaacggtgcc ttcgtttttt cacttccact tgtgtttgaa gagtgtttat gatgctgctc
                                                                    1560
catacatacg tggctccaaa tggcttctga gctacactga aacccggagg cctgtgcgcg
                                                                    1620
gggctgtgga gagccgagag gttcagcgca gcagccttct cctgcacggt gqccatqqcc
                                                                    1680
cttgctcccc ggacgccaac tcct
                                                                    1704
```

```
<210> 6102
<211> 2485
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2307)...(433)
<223> similar to gi2584787 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6102
ttttttttt ttcacagttc tgacatttt attcactgat cataaatata gtctcatgag 60
cattaaggtg atcatgaatg atgtactagc acctggaaca tgaccatcat ggagcactca 120
ctgattcccc atcactggcc aaagaagtcg gggcatcttc ctttcaccaa gtgttcaact 180
ttggagggac cctccttctg gtgcagcaat tttattcttg gcttgttctc aacaattaaa 240
aaatcataaa agactgagtg tttgcaataa aatatcaaag aggataagaa gattttctgt 300
```

```
tettettaaa gtetaaagta aaaaggggag gtagggaaga aggaaaggaa aggggaaaga
                                                                      360
tgtcagggat ctgccacgtt tcttccttcc tccagagcat tttacaaaaa caaaaccggg
                                                                      420
gaggtattta ttaatgctgt ttggaqatqq gttgcgtctc tctqatqaqc cactcqaqaq
                                                                      480
cttcctggcg gccctgtttc tgcaattcct tcccaatcac atccctgcag gtcaggtggt
                                                                      540
aattgttgag ccagtcgcac tctttgtctg taagagaatc cacatctatc attttggtct
                                                                      600
gaattggaac caatgttaga ggttcaaagg tcaggcttcc ccgqttatta aaattatact
                                                                      660
tggtcttcac aggaaccaca aggacaacat tctcaatgcg aattccaaaa gccccatctt
                                                                      720
catagtaccc gggctcatca gtgacaatca tgcctgcctc caagggctca tcagagaatg
                                                                      780
ttttgtaact gatgccgcaa ggaccctcat ggacattcaa aaaagaccca acaccatgtc
                                                                      840
cagtcccgtg caagtaatct aggcctgaat cccataaagc tgaacgggca aaggagtcaa
                                                                      900
gaaggtgacc tttggttcca gtcgggaaaa cggctgcact cacagctatg tggcccttga
                                                                      960
ggacatatgt gaagcattcc ttctcgtagg ctgtaggggt cccaaaatgc attgtccgcg
                                                                     1020
teacatetgt ggtgeeatee ttgtattgag caecegagte aataaggtae aceteateea
                                                                     1080
gggacaaggt cctattcgtc tcagggactg gcgcgtagtg aatgatggcg ccgttgggtc
                                                                     1140
ccgtactgga aattgttggg aagctcaggt ccacaaagtc tqcctqttqc ctqcqaaact
                                                                     1200
cctcagcttt gtcagcagct gagatctctg tcacaccacc tttgggaacc tctttctcca
                                                                     1260
gccagttaaa gagttcacag agagcaacag catctttaat gtgagcccgc ctcatqcctt
                                                                     1320
ctgactcaag ctgaattctt cacaagcttt ggcgatgcag atgggggtgt aaggcataca
                                                                     1380
gcagcggtgg tccttgggga tggtctcgct cacagcatag ctggccttgt cactgaccca
                                                                     1440
caccttetee ettggggaga ggteageaca cagggeettg agetegetea ggatggaett
                                                                     1500
gtagggatgc acctggatcc tgtattcggc ttccagaccc aagtcaagaa gcaggtgctc
                                                                     1560
cttcacactg ggggcgtcta tgcggtcacc atcaatgaag agcatgatcg tctctaqtcc
                                                                     1620
tatgattgcg taggagaaaa atactggatt gtgctccaca tctgatcctc ggagattaaa
                                                                     1680
tagccacgca atctcatcca aggcagtgac cacaaaccac atgacgttcc tctcagccat
                                                                     1740
tttcaaccga aggtctgcaa ccttgtcctt ccaggagatg cctgtgtaat ccaggcccag
                                                                     1800
tgtgaggaga ggcttgcaag ggcgctcagg acggtctgtc cagattttgt caacgaggtt
                                                                     1860
ctccttgaca ggaatgaggt gatggccggc acttctcaga actttggcca ttttcttcca
                                                                     1920
ataatctgta ggaatgatca aggggtccac accaacctg gatccttcag gaagcacact
                                                                     1980
caccagccag tetteetgag ttggtgtgtc etteagacce atetteataa gtgteeagtt
                                                                     2040
gctgtccatt tgcttggcag cctggagaaa gtagcgcccg tcagtccaca tgqctqcatq
                                                                     2100
ctcttctgtg atgatggctg tgcccgcaga gccatcgaat ccagagacaa aagcccgccg
                                                                     2160
acagtcacat ggagcaatat actcactctg atgagcatct cccgatggga tgatgtaggc
                                                                     2220
ctggatcggt tcggtcacat actcagagtt cctcatggct tgtctcagct gccgaaqcaq
                                                                     2280
ctctgaagtc acctttggag gcattctgcc gtctgtttcc acacctgtgt ctcctgagtg
                                                                     2340
tgtcacctcg ttaggttcaa ttattcttaa atttctcagt tgaaaatcct ggtgattcac
                                                                     2400
cettactege ggtggetttt tggaggetge catteggegg tgaegtgeec cageccaegt
                                                                     2460
caggggagcg cagaccagca cgaaa
                                                                     2485
```

```
<210> 6103
<211> 1513
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1444)...(529)
<223> similar to gi5824207 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6103

```
tttttttttt ttctcaaaga tctatatatt ttcagccaca aagcttaaaa tctcaaatgt
                                                                       60
caacgagtag gatttcaggc aaaataaaag aaaagtagaa aataaaaatc agaatgtaga
                                                                      120
tecatgttgg gagageaggt taacttteca ggtaatteat actgagattg tttacacage
                                                                      180
tectgegggt ceggetttet gtggetttet ttagetaagg ceagaaatte aaaaaaatee
                                                                      240
caatggttta atggatccct cctcacccat ccatccaccc aatgagaaag aagaatttgt
                                                                      300
ggagggcagg gggatatcac aagagaaaat ggcacaccag ggtgtaatgt ctcaaataaa
                                                                      360
aggettaett tacaettaat aetagtatat taetgtteat aataatatat egtaaaatta
                                                                      420
tcatgttata aaaatatata ataagatctt ataagaaact ctgaatggat tgatgcttga
                                                                      480
taattctctt aagtagaaca caatgaaata atagtggctg gctaagttcc atcaattttt
                                                                      540
ttttaattet ttttgaettt ttetegtggt ettetgttat eetttetgea ggtegettet
                                                                      600
tcaacccctt acattttcct ggtttgtagt ttgcttaggt cttgcttctg catatgaatc
                                                                      660
cttccataag ttgtaccaaa agtatcatgg gaaatatttt tcttcttctt tggcttgaga
                                                                      720
gcttttggca ttttcataga taatttataa aggtcatccg atgccaggtg tgtcctcctc
                                                                      780
agaaccagat ccaatgaggg tcccatctct tccaattcaa tccgtggtgt tctgcaacca
                                                                      840
gatttettea acageaactt atagettega aagtaaatet teecatteag tgeagtgaag
                                                                      900
tgcagaacat actctaatcc agccaggcgg atatttgata ctgtggggcc tctgaagaaa
                                                                      960
tcaataagaa gactttttag tcttctataa tcttctgtta catcgaaatc atcgccagca
                                                                     1020
aatatcagca tgggttttgt tccctcagga catttactgt tcttaatgtc ttttaqaqaq
                                                                     1080
acaaaattct caatacctaa ttcaatcata tccagcacat ggtagtcata catacgacct
                                                                     1140
attactagat tatttggccg cttcttatta tgggagccaa acatgaataa agaacaatct
                                                                     1200
gacttetttg aaaagaatte cagtgatgte tgateeteaa aaggtettgt aatattttte
                                                                     1260
tttttatata gtacaccgta tggttttttc agtgcataca catctttaag tacttttgtc
                                                                     1320
actgttgcat ttgcatttcc ccctttaatc agcatggcat ttttaatatt ttcattgagt
                                                                     1380
tteggttete tetteteaag gaatetettg getetttteg ttttgggett taetaetega
                                                                     1440
tecagagtgt ceategetae egetaeetge aactettaae eagggggeat geaegtgeee
                                                                     1500
tcggcgatta cgt
                                                                     1513
```

```
<210> 6104
<211> 3196
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46)...(3139)
<223> similar to gi559056 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6104
geggeegege tggggatgtt getgtggtte eeegeetgte aggegtteaa eetggaegtg
                                                                       60
gaaaagctca cagtgtacag cggccccaag ggcagctact tcggctacgc cgtggacttc
                                                                      120
cacatacceg acgcccgcac agcgagtgtc ttggtggggg cgcccaaagc caacaccagc
                                                                      180
cagcccgata tcgtggaagg gggagccgtc tattactgtc cttggcccgc ggaggggtct
                                                                      240
gcgcagtgca ggcagatacc gtttgacacc accaacaaca gaaagatcag agttaatgga
                                                                      300
accaaagaac ctatcgagtt caaatccaat cagtggtttg ggagcaacag tgaaagcttc
                                                                      360
acaaagggaa aagttgtggg cctgttgctc ctttattatt cacttggagg aactttttaa
                                                                      420
aaccgacacc agaaaaagga ccagttggca cctgctatgt agcaattcag aacttcagcg
                                                                      480
cttatgccga gttctctcct tgcggaaaca gcaatgctga tccggaaggc cagggttact
                                                                      540
gccaagcagg atttagtctg gatttttata agaatggaga ccttattgtg ggaggacctg
                                                                      600
ggagtttcta ctggcaagga caagtgatca ctgccagtgt tgcagatatc attgcaaatt
                                                                      660
```

```
actcattcaa ggatatcctc aggaaactgg caggagaaaa gcagacggaa gtggctccag
                                                                      720
                                                                      780
cttcctatga tgacagttac cttggatact cagttgctgc tggggagttt actggggatt
                                                                      840
ctcaqcaaga attggttgct ggaattccaa gaggagcaca gaattttgga tatgtttcca
                                                                      900
tcattaactc ctacgatatg acgtttattc agaatttcac gggagaacag atggcatctt
                                                                      960
attttggata taccgttgtc gtatcagatg ttaacagtga tggactggat gatgtcctgg
                                                                     1020
ttggggcacc tctctttatg gaacgtgaat ttgagagcaa ccccagagaa gtagggcaaa
                                                                     1080
totacotgta tttgcaagtg agotototoc tottcagaga cocccagato otcactggca
                                                                     1140
ccgagacgtt tgggagattc ggtagtgcta tggcacactt aggagacctg aaccaagatg
gctacaatga cattgccatc ggagtgcctt ttgcaggcaa ggatcaaaga ggcaaagtgc
                                                                     1200
tcatttataa tgggaacaaa gatggcttaa acaccaagcc cttccccaag ttctgccaag
                                                                     1260
                                                                     1320
gagtgtgggc ctcacatgct gtcccttccg gatttggctt tactttaaga ggagattcag
acatagacaa gaatgattac ccagatttga ttgtgggtgc atttggaaca ggaaaagtcg
                                                                     1380
ctgtttacag agcaagaccg gttgtgactg tagatgccca gcttctgctg cacccaatga
                                                                     1440
ttatcaatct tgaaaataaa acttgccagg ttccagactc tatgacatct gctgcctgct
                                                                     1500
tttctttaag agtatgtgca tctgtcacag gccagagcat tgcaaacaca atagtcttga
                                                                     1560
tggcagaggt gcaattagat tccctgaaac agaaaggagc tattaaacgg acgctcttcc
                                                                     1620
ttgataacca tcaggctcat cgcgtcttcc ctcttgtgat aaaaaggcag aaatcccacc
                                                                     1680
agtgccagga tttcatcgtt taccttcgag atgaaactga attccgagat aaattatctc
                                                                     1740
caatcaacat tagtttgaat tacagtttgg acgaatccac ctttaaagaa ggcctggaag
                                                                     1800
tgaaaccaat attgaactac tacagagaaa acattgttag tgaacaggct cacattctgg
                                                                     1860
tggactgtgg agaagacaat ctgtgtgttc ctgacttgaa gctgtcggct agaccagata
                                                                     1920
agcatcaggt aatcattgga gatgaaaatc accttatgct cataataaat gcaagaaatg
                                                                     1980
aaggggaagg agcatatgaa gctgaactct ttgtaatgat accagaagag gcagattatg
                                                                     2040
ttggaatcga acgcaacaac aagggatttc gaccactgag ctgtgagtac aagatggaaa
                                                                     2100
atgtaaccag gatggtggtg tgtgaccttg ggaaccctat ggtgtctgga acaaattatt
                                                                     2160
ccctgggcct ccgatttgca gttccacgtc ttgagaaaac aaacatgagc attaacttcg
                                                                     2220
atctccaaat cagaagttcc aacaaggaca atccagacag caattttgtg agcctgcaaa
                                                                     2280
tcaacatcac tgctgtagcg caggtggaaa taagaggagt gtcacaccct ccgcagattg
                                                                     2340
ttctgcccat tcataactgg gaaccagaag aggagcccca caaagaggag gaggttggac
                                                                     2400
cattggtgga acatatttat gagctgcaca atattggacc aagtaccatc agtgacacca
                                                                     2460
teetggaggt gggetggeet ttetetgeee gggatgaatt tettetetat atttteeata
                                                                     2520
ttcaaactct gggacctctg cagtgccaac caaatcctaa tatcaatcca caggatataa
                                                                     2580
agcetgetge etceccagag gacacceetg ageteagege etttttgega aactetacta
                                                                     2640
ttcctcatct tgtcaggaag agggatgtac atgtggtcga attccacaga cagagccctg
                                                                     2700
caaaaatact gaattgtaca aatatcgagt gtttacaaat ctcctgtgca gtgggacgac
                                                                     2760
tegaaggagg agaaagegea gteetgaaag teaggteaeg attatgggee eacacettee
                                                                     2820
tccagagaaa aaatgatccc tatgctcttg catccctggt gtcctttgaa gttaagaaga
                                                                     2880
tgccttatac agatcagcca gcaaaactcc cagaaggaag catagcaatt aagacatcag
                                                                     2940
ttatttgggc aactccgaat gtttccttct caatcccatt atgggtaata atactagcaa
                                                                     3000
tacttcttgg attgttggtt ctcgccattt taaccttagc tttatggaag tgtggattct
                                                                     3060
ttgacagage cagaceteet caggaggaca tgacegacag ggaacagetg acaaatgaca
                                                                     3120
agacccctga ggcatgacaa gaaaaaaaaa gaagaccaaa gacctcaaac actggtcctg
                                                                     3180
ttcaaaaaa aggggg
                                                                     3196
```

```
<210> 6105
<211> 9754
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (640)...(8288)
<223> similar to gil666075 in the genepept database release 114,
```

```
<400> 6105
                                                                     60
geggeegeet tagegeeegg tgettgggte ggegeeggga getgaggage gageataett
                                                                    120
caaaagcaca accaggacat ggagcgggga cagaggcggc gactagggga aggtgaagcc
                                                                    180
gtcgctgcag gaggaggagc aggaggaggt gacgcaggag aaacgcaccg cccggagccc
                                                                    240
gtctgagctc agcgagagcc ccagcctgag gggagaaggg gaagagggcc gtcgccggcc
                                                                    300
aaggaggagg aggaggcggg cgcggcgagg agcgagttcc ggcgccggtg tgcagccttt
                                                                    360
tggttgagac gcccgcagcc ccgagcccgg ccgccgcagc ctttcgatac actttgttgc
                                                                    420
eggteacece egggeetggg atgeacecag ggtaggtete gteeegggae egageeceae
                                                                    480
cgtcgcctgg tgcctcccgc ctccgtgtgc cctggttgtg agaagacgtc tgtgtcgtgc
ggttatgcaa tggtctctgc aagatggttt attcttgaat tggacctttt taagactgac
                                                                    540
                                                                    600
aaatgctggt acttcatctt ctataagtgg actataattt cttttctcaa gacaactaca
                                                                     660
taagcagaca aaattgcaaa gatctgccct gtgtcgagta tgacagccac gactcgtggc
                                                                     720
teteeggteg gagggaatga caaccaggge caggeteetg atggacagte teageeece
                                                                     780
ctccaacaga atcagacttc atcgcctgat tcttccaatg aaaattcccc ggcaactccc
                                                                     840
ccagatgagc aaggtcaagg tgatgcccca ccacagcttg aagatgagga acctgcattt
                                                                    900
ccacatactg acttggccaa gttggatgac atgatcaaca ggcctcgatg ggtggttcca
                                                                     960
gttttgccga aaggggaatt agaagtgctt ttagaagctg ctattgatct tagtaaaaag
                                                                    1020
ggccttgatg ttaaaagtga agcatgtcag cgatttttcc gtgatgggct aacaatatca
                                                                    1080
ttcactaaaa ttcttacaga tgaagcagtg agtggctgga agtttgaaat tcataggtgt
                                                                    1140
ctggtggagc tatggtgtgg cccaagttgt ccccaagact ggtttcgcac ttttagaact
                                                                    1200
tettgecatg geettaaate eteattgeaa atteeatate tacaatggta caegtecatg
                                                                    1260
tgaatcagtt tcctcaagtg ttcagttgcc tgaagatgaa ctctttgctc gttctccaga
                                                                    1320
tectegatea ccaaagggtt ggetagtgga tetteteaac aaatttggea etttaaatgg
                                                                    1380
gttccagatt ttgcatgatc gttttattaa tggatcagca ttaaacgttc aaataattgc
                                                                    1440
agecettatt aaaccatttg ggeaatgeta tgagtttete aetetteata cagtgaaaga
agtactttct tccaataata gaaatggttc cacagttttt agaaaactta actgatgaag
                                                                    1500
agctgaaaaa agaagcaaag aatgaagcca aaaatgatgc tctttcaatg attattaaat
                                                                    1560
                                                                    1620
ctttgaagaa tttagcttca agggttccag gacaagaaga aactgttaaa aacttagaaa
                                                                    1680
tatttaggtt aaaaatgata cttagattat tgcaaatttc ttctttcaat ggaaagatga
                                                                    1740
1800
gtaatcctga ggaggaagag tggctcacag ctgaacgaat ggcagaatgg atacagcaga
acaatatett atecatagtg ttgegagata gtetteatea gecacagtat gtagaaaagt
                                                                    1860
tagagaagat tettegtttt gteateaaag aaaaagetet gacettacag gatettgata
                                                                    1920
atatetggge ageaeaggea gggaaacatg aageeattgt gaagaatgta catgatetee
                                                                    1980
                                                                    2040
tggcaaaatt ggcatgggct tttttctcct gaacaacttg atcatctttt tgattgtttt
aaggccagtt ggacaaatgc gagtaaaaag caacgtgaaa agctacttga gctgatacgt
                                                                    2100
cgtcttgcag aagatgataa agatggtgtg atggcacaca gagtgttgaa ccttctgtgg
                                                                    2160
                                                                    2220
aatctggctc acagtgatga tgtgcctgta gatatcatgg acctggctct cagtgcccac
ataaaaatac tagattacag ttgctcccag gaccgtgata cacaaaagat ccaatggata
                                                                    2280
gatcgcttta tagaagaact tcgcacaaat gacaaatggg ttattcccgc actgaaacaa
                                                                    2340
                                                                    2400
attagagaaa tttgtagttt gtttggtgaa gcgcctcaaa atttgagtca aactcagcga
agtocccatg tgttttatcg ccatgactta atcaatcaac ttcaacacaa tcatgcccta
                                                                    2460
gttactttgg tagcagaaaa ccttgtaact tacatggaaa gcatgagact atatgctaga
                                                                    2520
                                                                    2580
gaccatgaag attatgaccc acaaactgtg aggctgggaa gtagatatag tcatgttcaa
gaagttcaag aacggcttaa cttccttaga tttttattga aggatggtca gctgtggcta
                                                                    2640
                                                                    2700
tgtgctcctc aggcaaaaca aatatggaaa tgcttagctg agaatgcagt ttacctttgt
gatcgtgaag cctgttttaa gtggtattcc aagttgatgg gggatgaacc agacttagat
                                                                    2760
cctgatatta ataaggactt ctttgaaagt aatgtgcttc agcttgatcc ttctctqtta
                                                                    2820
                                                                    2880
actgaaaatg gaatgaagtg ttttgagcga ttcttcaaag ctgtgaattg tcgagaagga
                                                                    2940
aaactagtag caaaaaggag agcctatatg atggatgact tggagttaat aggattagat
tacctttgga gggtcgtgat tcagagtaat gatgatattg ccagcagagc tatagatctc
                                                                    3000
                                                                    3060
ctcaaagaga tatacacgaa ccttggtcca agactacaag tcaatcaggt ggtgatccat
```

```
gaagacttca ttcagtcttg ttttgatcgt ctgaaggctt cctatgacac attgtgtgtt
                                                                     3120
                                                                     3180
ttggatggtg acaaagacag tgttaattgt gcaagacagg aagctgttcg aatggttcga
gtattaactg ttttaaggga atatataaat gaatgtgaca gtgattatca tgaggaaaga
                                                                     3240
acaattetee ctatgtegag ageatteege ggtaaacace tetettttgt agttegattt
                                                                     3300
                                                                     3360
ccaaaccagg gcagacaggt tgatgacttg gaggtatggt ctcatacaaa tgatacaatt
ggttcagtac gacgatgtat tctcaatcgt attaaagcca acgtagccca tacaaaaatt
                                                                     3420
gagctetttg tgggcgggga getgatagat eetgeagatg atagaaagtt gattggacaa
                                                                     3480
ttaaacttaa aagataaatc gcttattaca gccaaactta cacagataag ttccaatatg
                                                                     3540
ccttcaagcc ctgatagctc ttctgattcc tccactggat ctcctggaaa ccatggtaat
                                                                     3600
                                                                     3660
cattacagtg atggtcccaa tccagaagtg gaaagctgtt tgcctggagt gataatgtca
                                                                     3720
ctgcatccca gatacatctc ttttctttgg caagttgcag acttaggtag cagcctaaat
atgccacccc ttagagatgg agcaagagta cttatgaaac ttatgccgcc agatagcaca
                                                                     3780
acgatagaaa aattaagagc tatttgttta gaccatgcca aacttggaga aagcagcctt
                                                                     3840
agtocatoto ttgactoact tttctttggt cottcagcot cacaagtgct atatotaaca
                                                                     3900
gaggtagtet atgeettgtt aatgeetget ggtgeacete tggetgatga tteetetgat
                                                                     3960
tttcagtttc acttcttgaa aagtggtggc ctaccccttg tactgagtat gctaaccaga
                                                                     4020
aataacttcc taccgaatgc agatatggaa actcgaaggg gtgcctacct caatgctctt
                                                                     4080
aaaatagcca agcttttgct aactgccatt ggctatggtc atgttcgagc tgtqqcaqaa
                                                                     4140
gcttgtcagc caggtgtaga aggtgtgaat cccatgacac agatcaacca agttacccat
                                                                     4200
gatcaagcag tggtgctaca aagtgccctt cagagcattc ctaatccatc atccgagtgc
                                                                     4260
atgettagaa atgtgteagt tegtettget eageagatat etgatgagge tteaagatat
                                                                     4320
atgcctgata tttgtgtaat tagagctata caaaaaatta tctgggcatc aggatgtggg
                                                                     4380
tegttacage tagtatttag cecaaatgaa gaaatcacta aaatttatga gaagaccaat
                                                                     4440
gcaggcaatg agccagactt ggaagacgaa caggtttgct gtgaagcatt ggaagtgatg
                                                                     4500
accttatgtt ttgccttgat tccaacagcc ttagatgctc ttagtaaaga aaaggcttgg
                                                                     4560
cagacattca tcattgactt actattgcac tgtcacagca aaactgttcg tcaggtggca
                                                                     4620
caggagcagt tettttaat gtgcaccaga tgttgcatgg gacaccggcc tetaetttte
                                                                     4680
ttcattactc tactctttac tgttttgggg agcacagcaa gagagagagc taaacactca
                                                                     4740
ggcgactact ttactctttt aagacacctt tttaattacg cttacaatag taatattaat
                                                                     4800
gtacccaatg ctgaagttct tctcaataat gaaattgatt ggcttaaaag aattagggat
                                                                     4860
gatgttaaaa gaacaggaga aacgggtatt gaagagacga tcttagaggg ccaccttgga
                                                                     4920
gtgacaaagg agttactggc ctttcaaact tctgagaaaa aatttcatat tggttgtgaa
                                                                     4980
aaaggaggtg ctaatctcat taaagaatta attgatgatt tcatatttcc tgcatccaat
                                                                     5040
gtttacctac agtatatgag aaatggagag cttccagctg aacaggctat tccggtctgt
                                                                     5100
ggttcaccac ctacaattaa tgctggtttt gaattacttg tagcattagc tgttggctgt
                                                                     5160
gtgaggaatc tcaaacaaat agtagattct ttgactgaaa tgtattacat tggcacagca
                                                                     5220
ataactactt gtgaagcact tactgagtgg gaatatctgc cacctgttgg accccgccca
                                                                     5280
cccaaaggat tcgtggggct gaaaaatgcc ggtgctactt gttacatgaa ttctgtgatt
                                                                     5340
cagcaactct acatgattcc ttccattagg aacggtattc ttgccattga aggcacaggt
                                                                     5400
agtgatgtag atgatgatat gtctggggat gagaagcagg acaatgagag caatgttgat
                                                                     5460
cccagggatg atgtatttgg atatcctcaa caatttgaag ataaaccagc attaagtaaa
                                                                     5520
actgaagata gaaaagagta caacattggt gtcctaagac accttcaggt catctttggt
                                                                     5580
catttagctg cttctcgact gcaatactat gtgcccagag gattttggaa acagttcagg
                                                                     5640
ctttggggtg agcctgttaa tctgcgtgaa caacacgatg ctttagaatt ttttaattca
                                                                     5700
ttggtggata gtttagatga agctttaaaa gctttaggac atccagctat gctaagtaaa
                                                                     5760
gtcttaggag gttcctttgc tgatcagaag atctgccaag gctgcccaca taggtacgaa
                                                                     5820
tgtgaagaat cttttacgac cctaaacgta gacattagaa atcaccaaaa tcttcttgat
                                                                     5880
tctttggaac agtatgtcaa aggagattta ctagaaggtg caaatgcata tcattgtgaa
                                                                     5940
aaatgcaata aaaaggttga taccgtaaag cgcttgctga ttaaaaaaatt acctcctgtt
                                                                     6000
cttgctatac aactaaagcg atttgactat gactgggaaa gagaatgtgc aatcaagttc
                                                                     6060
aatgattatt ttgaatttcc tcgagagctg gacatggaac cttacacagt tgcaggtgtc
                                                                     6120
gcaaagctgg aaggggataa tgtaaaccca gagagtcagt tgatacaaca gagtgagcag
                                                                     6180
tetgaaagtg agacageagg aagcacaaaa tacagaettg tgggtgtget egtacacagt
                                                                     6240
ggtcaagcga gtggggggca ttattattct tacatcatcc aaaggaatgg tggagatggt
                                                                     6300
gagagaaatc gctggtataa atttgatgat ggtgatgtaa cagaatgtaa aatggatgat
                                                                     6360
gacgaagaaa tgaaaaacca gtgttttggt ggagagtaca tgggagaagt gtttgatcac
                                                                     6420
atgatgaagc gtatgtcata caggcgccag aaaaggtggt ggaatgctta tatacttttt
                                                                     6480
```

```
tatgaacgaa tggacacaat agaccaagat gatgagttga taagatatat atcagagctt
                                                                     6540
gctatcacca ccagacctca tcagattatt atgccatcag ccattgagag aagtgtacgg
                                                                     6600
aaacagaacg tacaattcat gcataaccga atgcagtaca gtatggagta ttttcagttt
                                                                     6660
atgaaaaaac tgcttacatg taatggcgtt tacttaaacc ctcctcccgg gcaagatcac
                                                                     6720
ctgttgcctg aagcagaaga aatcactatg atcagtattc aacttgctgc taggttcctc
                                                                     6780
tttactacag gatttcacac aaagaaagta gtccgtggct ctgccagtga ttggtatgat
                                                                     6840
gcattgtgta tteteetteg teacageaag aatgtaegtt tttggtttge teataaegte
                                                                     6900
ctttttaatg tttcaaatcg cttctccgaa taccttctgg agtgccctag tgcagaagtg
                                                                     6960
aggggtgcgt ttgcaaaact tatagtcttt attgcacatt tttccttgca agatgggcca
                                                                     7020
tgtccttcac cttttgcctc tcctggacct tctagtcagg cttatgacaa cttaagcttg
                                                                     7080
agtgatcact tactaagagc agtactaaat ctcttgagaa gggaagtttc agagcatggg
                                                                     7140
cgtcatttac agcagtattt caacctgttt gtaatgtatg ccaatttagg tgtggcagag
                                                                     7200
aagacacagc ttctgaaatt gagtgtacct gctactttta tgcttgtgtc tttagatgaa
                                                                     7260
ggtccaggtc ctccaatcaa ataccagtat gctgaattag gcaaattata ctcagtagtg
                                                                     7320
tcacagctga tccgctgttg caatgtctct tcaagaatgc agtcttcaat caatggtaat
                                                                     7380
cctcctcttc ccaatccttt tggtgatcct aatttatcac aacctataat gccaattcag
                                                                     7440
cagaatgtgg cagacatttt atttgtgaga acaagttatg tgaagaaaat cattgaagac
                                                                     7500
tgcagtaatt cagaggaaac cgtcaaattg cttcgttttt gctgctggga gaatcctcag
                                                                     7560
ttctcatcta ctgtcctcag tgaacttctc tggcaggttg catattccta tacctatgaa
                                                                     7620
ctgcggccct atttggatct gcttttgcaa atcttactga ttgaggactc ctggcaaact
                                                                     7680
cacagaattc ataatgcact gaaaggaatt ccagatgacc gagatgggct gtttgacaca
                                                                     7740
atccagcgct ctaagaatca ctatcaaaaa agagcatacc agtgtataaa atgtatqgta
                                                                     7800
getetattta gtaactgtee tgttgettae caaateetge agggeaatgg agatettaaa
                                                                     7860
agaaagtgga cctgggcagt ggaatggctt ggagatgaac ttgaaagaag accatatact
                                                                     7920
ggcaatcete agtacaetta caacaattgg tetececcag tgcaaagcaa tgaaacgtee
                                                                     7980
aatggttatt tettggagag atcacatagt getaggatga caettgcaaa agettgtgaa
                                                                     8040
ctctgtccag aggaggagcc agatgaccaa gatgctccag atgaacatga gtcgcctcca
                                                                     8100
cctgaagatg ccccattgta cccccattca cctggatctc agtatcaaca gaataaccat
                                                                     8160
gtgcatggac agccatatac aggcccagca gcacatcaca tgaacaaccc tcagagaact
                                                                     8220
ggccaacgag cacaagaaaa ttatgaaggc agtgaagaag tatccccacc tcaaaccaag
                                                                     8280
gatcaatgaa atgcacataa ttaactggtt ccatcaagac tgtgcaccca ggccttacag
                                                                     8340
tccaaccttt ttctgtgtct ggctaatatt taaaactaga aaaactattc ctaatcaaca
                                                                     8400
tggagtggag agtttattca ctgtcttatc tgcagaaatt tgctgtcaat atgtaacccg
                                                                     8460
cctgcagtgg aaagtgtata gtgttttgta ataaatggcc tgatgctaat gtgtaaatgg
                                                                     8520
caaaggtgta tatagtatat taatgttgac tgttaattct taaqcaaqaa acttttttct
                                                                     8580
tgatgagact cacagatcta cacaaactac aaaagttaat tttcttgtta cacccactgc
                                                                     8640
actetgeaac cagtgttgeg cetgeeteat ggeagttgga teageteett tacaaaaaag
                                                                     8700
aaaaaaaaa aaccaacagc aacaaaacag agcccatcca tgtcagccac accaatagtt
                                                                     8760
tcatgttaat tctttgccac tggagtcaat tttgctatga gcaatgtaag gctggtaacc
                                                                     8820
tttaaattat ttggttgatg tggaaaattg gtgatgtaac actgtttcta gatttttttc
                                                                     8880
attgcctttt tattctgata ttaggttaat cactttgaag ctatagttat gctgtaacat
                                                                     8940
ttagcatggc ttcacaccaa gttagtgtag ccaatgagga aaaagttacc ataatgacag
                                                                     9000
cagttgtccg agaagtgaca gctgtattac tcagagcttt tacttcttac acctagaata
                                                                     9060
ttaaaatata aaacaagggg agaaatgtga cagtctattt tcagttgcac atatgttcct
                                                                     9120
tatatataat gtttgacagt tcaatctctg ggtggaataa agaacactta cgtatcagta
                                                                     9180
atgggaattt ttaaagattt aaaacaaata tgcaaaaatt tgctatgcca agatgctgga
                                                                     9240
gcataatata agactgtatt tggtgtgctt gttttgtttc tttggtagag tttattaggt
                                                                     9300
gaatcttcta aaactttcct tctgttggat cccagtgacg tggaagtcat cagaacccca
                                                                     9360
cggtacttgg agtacctctc tgcaccaaga tagctggctg attttctgct cagtcacaat
                                                                     9420
tttacttgaa agcaagaatt gtcctagctc cttttccatt attccaaaac gtttaacgtt
                                                                     9480
caaagcaggg tctcattaaa aaagaaacta ctggttgata taattgagat attacaattt
                                                                     9540
cagaataaac atttgattaa aaataaggaa atcctcagtt catactgtat ttaaaagaga
                                                                     9600
attggtaact tgaatgtgtg taattttttg gaacctgtct aaaaaccaaa tacccctgca
                                                                     9660
aacagataca gcccacccta ttctatttaa atattttgct gttttatttt atagaaatta
                                                                     9720
ttttgctgaa ttcacaaata gaatttgatt taag
                                                                     9754
```

```
<210> 6106
<211> 1381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1229)...(90)
<223> similar to gi2217970 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6106 ttttttttt ttgaaggtat aaaacagcta atgttttact taactattct gaaagtaact 60 gacaggtaat aaaaatgtgg gttttattag tccactacag tcacaataca atcqtcatag 120 attteceett etgtatteat eecaceaaae accaaacaga geagtgtage agtetggett 180 tecteatgtg agteaceact gtggeteatt actttgteag etgaateete ttteteaget 240 teatggttea gagtgagaga gttgggaate ttetttetea gaageacaeg teaetggeee 300 atgggaatga taccacatgg gaatgggtcc caatcgtccc aggggggtag gaaqqaqtat 360 ccaaatttaa ggcaagggtc ccaatgctgc tcttctgtgt gatactgggt acattgtgtc 420 ccaggtgctc ctgcaggagt cattccacca aaggatgtac acatgttttt cccatggcca 480 cagctggagt ggggaagcac agcctgctgg aggcagcccc agtgggattt agcttctgcc 540 atttcatgtc acttatatca atgcagtgga ggtcatcata gaatctgtcc cccgccaagc 600 ctccgtggat gaagagcttt gtccctgctg ccaccatcac atgaccatgc cggqqaqatq 660 gaggatttcc aagtgtctct ggctgtgacc aggtcagagt gtttgcgtca aacacatqca 720 gettegtgte etgeaeggge tgggeaecte teteteegee eccaaagaca tatagetggt 780 ttccaatggc tgccgatgat gtgtggaatg ttcttgggga tggtggggg ctggtcactt 840 ctggcgtggt ccacgtcctg gtttcaggat tcaggacttq taqacaattt cqatttcctq 900 attggttggc acctccaaat acccagatac ggtcaggtgt gcaggaggga atgaagctag 960 catgitcata ccggggcaag aggcccttgc aggtatctaa gtcccactgg tgttttccca 1020 gatecatggt gtgcacgtet gagaagette tgtttggatt tgeteeccca acaatgaaga 1080 cettecetet ettggcatta ecaactgggg gtaaatatga acagetgtgg ceaactegag 1140 cacaggggct gtctccaggg acagtcaagg tgtaccatgt tgctttcctg ggcttgtctc 1200 caggttccaa gactggcagt tgcttcatgg tgtcctgcgg cctaggccac tgacagctgt 1260 ccccaaagtc cagagctcag ttaggctggc ttcacgtggg cgggacctcc cgcagcagcc 1320 gccgctacca gcccagcaaa tctcatcccc acgtggcagt tctgcggcga cttaggccag 1380 t 1381

```
<210> 6107
<211> 2006
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(1804)
<223> similar to gi179720 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6107
ctgtggcatc tcctgtcaca ttgggaaatg aagaattcca ggacatgggc ttggagggcg
                                                                       60
ceggtggage tatttettet etgtgetgee etgggetgte teagtttgee tggeteeaga
                                                                      120
ggtgaaaggc cacatteett tgggtcaaat gcagtcaaca agagetttge taagagcaga
                                                                      180
cagatgegga gtgtggatgt taccetgatg cecattgatt gtgagetgte tagttggtee
                                                                      240
tettggacca catgtgacce etgtcagaag aaaaggtaca ggtatgeeta ettgetecag
                                                                      300
ccctctcagt tccatgggga accgtgcaac ttctctgaca aggaagtcga agactgtgtt
                                                                      360
accaacagac catgcggaag tcaagtgcga tgtgaaggct ttgtgtgtgc acagacagga
                                                                      420
aggtgtgtaa accgcagact tctttgcaat ggggacaatg actgtggaga ccagtcagat
                                                                      480
tgaagcaaac tgtagaagga tttataaaaa atgtcagcat gaaatggacc aatactgggg
                                                                      540
aattggcagt ctggccagtg ggataaattt gttcacaaac agttttgagg gcccagttct
                                                                      600
tgatcacagg tattatgcag gtggatgctc cccgcattac atcctgaaca cgaggtttag
                                                                      660
gaagccctac aatgtggaaa gctacacgcc acagacccaa ggcaaatacg aattcatatt
                                                                      720
aaaagagtat gaatcatact cagattttga acgcaatgtc acagagaaaa tggcaagcaa
                                                                      780
gtctggtttc agttttggtt ttaaaatacc tggaatattt gaacttggca tcagtagtca
                                                                      840
aagtgatcga ggcaaacact atattaggag aaccaaacga ttctctcata ctaaaagcgt
                                                                      900
atttctgcat gcacgctctg accttgaagt agcacattac aagctgaaac ccaqaaqcct
                                                                      960
catgetecat tacgagttee tteagagagt taageggetg eccetggagt acagetaegg
                                                                     1020
ggaatacaga gatctcttcc gtgattttgg gacccactac atcacagagg ctgtgcttgg
                                                                     1080
gggcatttat gaatacaccc tcgttatgaa caaagaggcc atggagagag gagattatac
                                                                     1140
tettaacaac gtecatgeet gtgecaaaaa tgattttaaa attggtggtg ceattgaaga
                                                                     1200
ggtctacgtc agtctgggtg tgtctgtagg caaatgcaga ggtattctga atgaaataaa
                                                                     1260
agacagaaac aagagggaca ccatggtgga ggacttggtg gtcctggtac gaggaggggc
                                                                     1320
aagtgagcac atcaccaccc tggcatacca ggagctgccg acggcggacc tgatgcagga
                                                                     1380
gtggggagac gctgtgcagt acaacccagc catcatcaaa gttaaggtgg agcctctgta
                                                                     1440
tgaactagtg acagccacag attttgccta ttccagcaca gtgaggcaga acatgaagca
                                                                     1500
ggcactggag gagttccaga aggaagttag ttcctgccac tgtgctccct gccaaggaaa
                                                                     1560
tggagtccct gtcctgaaag gatcacgctg tgactgcatc tgtcctgttg gatcccaagg
                                                                     1620
cctagcctgt gaggtctcct atcggaagaa tacccccatt gatgggaagt ggaattgctg
                                                                     1680
gtcaaattgg tettcatget etggaagacg taagacaaga caaaggcagt gtaacaatce
                                                                     1740
acctcctcaa aatgggggta gccctgttc aggccctgct tcagaaacac ttgactgctc
                                                                     1800
ctagcagatg atacagcagt gggctacata caatgagagc cctgagccct caagaactca
                                                                     1860
egecagetea gecetacace agtttecace tggagtteat geaagggeaa aaggeagtge
                                                                     1920
catgcaagct gtttaaaata aagatgttac cttgtaaaat gcaagttgat ttaaataaat
                                                                     1980
actgagttaa aggcttaaaa aaaaaa
                                                                     2006
```

```
<210> 6108
<211> 3145
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (340)...(1167)
<223> similar to gi5912237 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6108 ggcacgagtg gttatgcagc acagcaactt cccagtctcc tgaaggagag agagtttcac 60 cttgggaccc ttaataaagt gtttgcatct cagtggttga atcataggca agtggtgtgt 120 180 ggcacaaaat gcaacacgct atttgtcgta gatgtccaga caagccagat caccaagatc 240 cccattctga aagaccggga gcctggaggt gtgacccagc agggctgtgg tatccatgcc 300 atcgagctga atccttctag aacactgcta gccactggag gagacaaccc caacagtctt 360 gccatctatc gactacctac gctggatcct gtgtgtgtag gagatgatgg acacaaggac 420 tggatctttt ccatcgcatg gatcagcgac actatggcag tgtctggctc acgtgatggt tctatgggac tctgggaggt gacagatgat gttttgacca aaagtgatgc gagacacaat 480 540 qtqtcacqqq tccctqtgta tgcacacatc actcacaagg ccttaaagga catccccaaa gaagacacaa accetgacaa etgcaaggtt egggetetgg eetteaacaa caagaacaag 600 660 gaactgggag cagtgtetet ggatggetac tttcatetet ggaaggetga aaatacaeta tctaagctcc tctccaccaa actgccatat tgccgtgaga atgtgtgtct ggcttatggt 720 agtgaatggt cagtttatgc agtgggctcc caagctcatg tctccttctt ggatccacgg 780 cagccatcat acaacgtcaa gtctgtctgt tccagggagc gaggcagtgg aatccggtca 840 900 gtgagtttct acgagcacat catcactgtg ggaacagggc agggctccct gctgttctat 960 gacatccgag ctcagagatt tctggaagag aggctctcag cttgttatgg gtccaagccc agactagcag gggagaatct gaaactaacc actgggcaaa ggctggctga atcatgatga 1020 1080 aacctggagg aattactttt cagacattga cttcttcccc aatgctgttt acacccactg ctacgacteg tetggaacga aactetttgt ggcaggaggt cccctccctt cagggeteca 1140 1200 tggaaactat gctgggctct ggagttaatg acaactcccc aaatgcagag atttacacta 1260 acticcatic tcagtiticci tgttictiti gattititit ticciaatig tgtgaggcic ttgtgtttta gtgggaacac caaagtttgc ctatagttta ggcacttaat aggaagaagc 1320 1380 tetgtacaga aatetgaaag ttgttttget ttttgtttte ceetttggta ateaaaattt 1440 tactatcttt tattatttct ggcttttcaa ccaaacattg ttgctaatcc ctatttttct 1500 ttaaqtgaca cacattetee tgtetetgge ttetteagge tgaaatgaca tagtetttet 1560 caccettact teactettga gaggtaggge teetttataa ttacatggtt geteteagae 1620 tttctgtgaa agtttgggag ctgtgtgtgt ctgtgtgtgt gtgagagaga gatcttgtct gcgtgtgtgt gtgtgatctt gtgtgcctgt aggtactgtg tgtcactgaa attacctgga 1680 gtgaggatta cttgtaatta aaatatttat aaaagaaaca actttattca cagagtccag 1740 1800 ctttgggact agtctgtatc ttgtttttta agtctaacaa cactgataat aggaagtaaa 1860 aacagaaagg aaaagaaatt accactggga aaatcttttt agttagattg taggcttcct ggggcctccc atgccaggac tgcaaagtga tccagcccta cctgtcttcc cacctgtgtg 1920 tecceegtgt gggaagttgg tgteacttee cetteceace eteacatetg ettagecagt 1980 agccacaccc ctaaaacatc agactcacca tccaggtgca gctccagagg ctacaaaaagg 2040 cttcatggga cttgaatccc catcctagct tctctctcct tcccctcaag acctgatctg 2100 gttttaaggg gcctggagct gggagtctca agtctgctaa gattcacatc catagccccc 2160 atggetttga ggagaateet etetgeeatt etteeaatet eeceagtggg tittgetatt 2220 2280 attttctaaa ttgggttaag tctaagaagg tgggggtgag cagggggttt atctgtgtgt 2340 agtgagtgct tcatgtgtgg aatattcatt ttcttactgc agtgggactt ggggttgaag 2400 ccaccectee tactetgttg gettageeet gagatggtga caggetggee tgeagteage atcattgtgc atgtgacagc atcaatgtga ttagtaattt gtctgttcct cccttgaact 2460 gtctgtttag tctgaggttt ttaaacttgc aggcagctga ctgtgatgtc cacttgttcc 2520 ctgattttta cacatcatgt caaagataac agctgttccc acccaccagt tcctctaagc 2580 acatactctg cttttctgtc aacatcccat tttggggaaa ggaaaagtca tatttattcc 2640 tgcaccccag ttttttaact tgttctccca gttgtccccc tcttctctgg gtgtaagaag 2700 ggaaattgga aaaaaaatta tatatatatt ctccttttaa tggtgggggg ctactggaga 2760 2820 ggagagacag caagtccacc ctaacttgtt acacagcaca taccacaggt tctggaattc tcatcttcga acctagagaa ataggtgcta taaacaggga attaagcaaa atgctggatg 2880 ctatagatct tttaattgtc ttaatttttt ttctattatt aaactacagg ctgtagattt 2940 3000 cttagttctc acagaacttc tatcatttta aactgacttg tatatttaaa aaaaaaatct tcagtaggat gttttgtact attgctagac cctcttctgt aatgggtaat gcgtttgatt 3060 gtttgagatt ttctgttttt aaaaatgtag cacttgactt tttgccaagg aaaaaaataa 3120 aaattattcc agtgcaaaaa aaaaa 3145

```
<210> 6109
<211> 3042
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (322)...(1664)
<223> similar to gi899300 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6109 60 gcgtggacgc gtgggctaga ccataatgca tcattacttt ccccagggat aaccaggtat 120 gtaagetett gtteagette etttgettee ttgeaegeet gagaatgtaa etttegttte 180 tcactcagct cctgtgggga aactcatttg tggagaccag ccctctggct tggtgagtga 240 atotggttta caccggotco tgocotgcot toactottot cocotgatto aagactooto tgctttggac tgaagcactg caggagtttg tgaccaagaa cttcaagagt caagacagaa 300 360 qqaaqccaag ggagcagtgc aatggatttc tcagtaaagg tagacataga gaaggaggtg 420 acctgcccca tctgcctgga gctcctgaca gaacctctga gcctagattg tggccacagc 480 ttctgccaag cctgcatcac tgcaaagatc aaggagtcag tgatcatctc aagaggggaa 540 agcagetgte etgtgtgtca gaccagatte cageetggga aceteegace taateggeat ctggccaaca tagttgagag agtcaaagag gtcaagatga gcccacagga ggggcagaag 600 660 agagatgtct gtgagcacca cggaaaaaaa ctccagatct tctgtaagga ggatggaaaa 720 gtcatttgct gggtttgtga actgtctcag gaacaccaag gtcaccaaac attccgcata aacgaggtgg tcaaggaatg tcaggaaaag ctgcaggtag ccctgcagag gctgataaag 780 gagaatcaag aggctgagaa gctggaagat gacatcagac aagagagaac cgcctggaag 840 900 aattatatcc agatcgagag acagaagatt ctgaaagggt tcaatgaaat gagagtcatc 960 ttggacaatg aggagcagag agagctgcaa aagctggagg aaggtgaggt gaatgtgctg 1020 gataacctgg cagcagctac agaccagctg gtccagcaga ggcaggatgc cagcacgctc 1080 atctcagatc tccagcggag gttgagggga tcgtcagtag agatgctgca ggatgtgatt gacgtcatga aaaggagtga aagctggaca ttgaagaagc caaaatctgt ttccaagaaa 1140 ctaaagagtg tattccgagt accagatctg agtgggatgc tgcaagttct taaagagctg 1200 acagatgtcc agtactactg ggtggacgtg atgctgaatc caggcagtgc cacttcgaat 1260 gttgctattt ctgtggatca gagacaagtg aaaactgtac gcacctgcac atttaagaat 1320 tcaaatccat gtgatttttc tgcttttggt gtcttcggct gccaatattt ctcttcgggg 1380 aaatattact gggaagtaga tgtgtctgga aagattgcct ggatcctggg cgtacacagt 1440 aaaataagta gtctgaataa aaggaagagc tctgggtttg cttttgatcc aagtgtaaat 1500 tattcaaaag tttactccag atatagacct caatatggct actgggttat aggattacag 1560 aatacatgtg aatataatgc ttttgaggac tcctcctctt ctgatcccaa ggttttgact 1620 ctctttatgg ctgtgcctcc ctgtcgtatt ggggttttcc tagactatga ggcaggcatt 1680 gtctcatttt tcaatgtcac aaaccacgga gcactcatct acaagttctc tggatgtcgc 1740 ttttctcgac ctgcttatcc gtatttcaat ccttggaact gcctagtccc catgactgtg 1800 tgcccaccga gctcctgagt gttctcattc ctttacccac ttctgcatag tagcccttgt 1860 gctgagactc agattctgca cctgagttca tctctactga gaccatctct tcctttcttt 1920 ccccttcttt tacttagaat gtctttgtat tcatttgcta gggcttccat agcaaagcat 1980 catagattgc tgatttaaac tgtaattgta ttgccgtact gtgggctgga aatcccaaat 2040 ctagattcca gcagagttgg ttctttctga ggtctgcaag gaagggctct gttccatgcc 2100 teteteettg gettgtagaa ggeatettgt eeetatgact etteacattg tetttatgta 2160 catctctgtg cccaagtttt ccctttttat taagacacca gtcatactgg ctcagggccc 2220 accgctaatg ccttaatgaa atcattttaa cattatattc tctacaaaga ccttatttcc 2280 aaataagata atatttggag gtattgggaa taaaaactcc aacatataaa tttgaggaag 2340

```
gcacgatttc actcataaca atcttaccct ttcttgcaag agatgcttgt acataatttt
                                                                    2400
                                                                     2460
cctaatacct tggtttcact agtagtaaac attattattt tttttatatt tgcaaaggaa
acatatctaa teetteetat agaaagaaca gtattgetgt aatteettt ettteetee
                                                                     2520
tcatttcctc tgccccttaa aagattgaag aaagagaaac ttgtcaactc atatccacgt
                                                                     2580
tatctagcaa agtacataag aatctatcac taagtaatgt atccttcaga atgtgttggt
                                                                     2640
                                                                     2700
ttaccagtga caccccatat tcatcacaaa attaaagcaa gaagtccata gtaatttatt
                                                                     2760
tgctaatagt ggatttttaa tgctcagagt ttctgaggtc aaattttatc ttttcactta
caagetetat gatettaaat aatttaetta atgtattttg gtgtatttte etcaaattaa
                                                                     2820
tattggtgtt caagactata tctaattcct ctgatcactt tgagaaacaa acttttatta
                                                                     2880
aatqtaaqqc acttttctat gaattttaaa tataaaaata aatattgttc tgattattac
                                                                     2940
                                                                     3000
tqaaaaqatq tcaqccattt caatqtcttg ggaaacaatt ttttgttttt gttctgtttt
                                                                     3042
ctttttgctt caataaaaca atagctggct ctaaaaaaaa aa
```

```
<210> 6110
<211> 6302
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6303)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (113)...(3050)
<223> similar to gi3043658 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6110 tetggaatte eegggtegae gatttegtet eggeegegge tetgtgeeet tgetgetgag 60 ggccacttcc tgggtcattc ctggaccggg agccgggctg gggctcacac gggggctgcc 120 180 egegtggeeg teteggegee tgegtgaeet eeeegeegge gggatgtgge gaetaegteg ggccgctgtg gcctgtgagg tctgccagtc tttagtgaaa cacagctctg gaataaaagg 240 aagtttacca ctacaaaaac tacatctggt ttcacgaagc atttatcatt cacatcatcc 300 360 taccttaaag cttcaacgac cccaattaag gacatccttt cagcagttct cttctctgac aaacctteet ttaegtaaac tgaaattete teeaattaaa tatggetaee ageetegeag 420 gaatttttgg ccagcaagat tagctacgag actcttaaaa cttcgctatc tcatactagg 480 540 ateggetgtt gggggtgget acacagecaa aaagaetttt gateagtgga aagatatgat accggacctt agtgaatata aatggattgt gcctgacatt gtgtgggaaa ttgatgagta 600 tategatttt gagaaaatta gaaaageeet teetagttea gaagaeettg taaagttage 660 accagacttt gacaagattg ttgaaagcct tagcttattg aaggactttt ttacctcagg 720 780 ttctccggaa gaaacggcgt ttagagcaac agatcgtgga tctgaaagtg acaagcattt tagaaaggtg tcagacaaag agaaaattga ccaacttcag gaagaacttc tgcacactca 840 gttgaagtat cagagaatct tggaacgatt agaaaaggag aacaaagaat tgagaaaatt 900 agtattgcag aaagatgaca aaggcattcc attcatagaa agcttaagga aatctttgat 960 tgacatgtat tctgaagttc ttgatgttct ctctgattat gatgccagtt ataatacgca 1020 agateatetg ceaegggttg ttgtggttgg agateagagt getggaaaga etagtgtgtt 1080 ggaaatgatt gcccaagctc gaatattccc aagaggatct ggggagatga tgacacgttc 1140 tecagttaag gtgactetga gtgaaggtee teaceatgtg geeetattta aagatagtte 1200

```
1260
tegggagttt gatettaeca aagaagaaga tettgeagea ttaagaeatg aaatagaaet
tegaatgagg aaaaatgtga aagaaggetg taeegttage eetgagaeea tateettaaa
                                                                     1320
tgtaaaaggc cctggactac agaggatggt gcttgttgac ttaccaggtg tgattaatac
                                                                     1380
                                                                     1440
tgtgacatca ggcatggctc ctgacacaaa ggaaactatt ttcagtatca gcaaagctta
catgcaggat cctaatgcca tcatactgtg tattcaagat ggatctgtgg atgctgaacg
                                                                     1500
cagtattgtt acagacttgg tcagtcaaat ggaccctcat ggaaggagaa ccatattcgt
                                                                     1560
tttgaccaaa gtagacctgg cagagaaaaa tgtagccagt ccaagcagga ttcagcagat
                                                                     1620
aattgaagga aagctcttcc caatgaaagc tttaggttat tttgctgttg taacaggaaa
                                                                     1680
agggaacagc tctgaaagca ttgaagctat aagagaatat gaagaagagt tttttcagaa
                                                                     1740
ttcaaagctc ctaaagacaa gcatgctaaa ggcacaccaa gtgactacaa gaaatttaag
                                                                     1800
ccttgcagta tcagactgct tttggaaaat ggtacgagag tctgttgaac aacaggctga
                                                                     1860
tagtttcaaa gcaacacgtt ttaaccttga aactgaatgg aagaataact atcctcgcct
                                                                     1920
gcgggaactt gaccggaatg aactatttga aaaagctaaa aatgaaatcc ttgatgaagt
                                                                     1980
tatcagtctg agccaggtta caccaaaaca ttgggaggaa atccttcaac aatctttgtg
                                                                     2040
ggaaagagta tcaactcatg tgattgaaaa catctacctt ccagctgcgc agaccatgaa
                                                                     2100
ttcaggaact tttaacacca cagtggatat caagcttaaa cagtggactg ataaacaact
                                                                     2160
tcctaataaa gcagtagagg ttgcttggga gaccctacaa gaagaatttt cccgctttat
                                                                     2220
gacagaaccg aaagggaaag agcatgatga catatttgat aaacttaaag aggccgttaa
                                                                     2280
ggaagaaagt attaaacgac acaagtggaa tgactttgcg gaggacagct tgagggttat
                                                                     2340
tcaacacaat gctttggaag accgatccat atctgataaa cagcaatggg atgcagctat
                                                                     2400
ttattttatg gaagaggctc tgcaggctcg tctcaaggat actgaaaatg caattgaaaa
                                                                     2460
catggtgggt ccagacctgg aaaaagaggt ggttatactg gaagaatcgg acccaagaac
                                                                     2520
agtgtgttca caatgaaacc aagaatgaat tggagaagat gttgaaatgt aatgaggagc
                                                                     2580
acccagetta tettgcaagt gatgaaataa ccacagteeg gaagaacett gaateeegag
                                                                     2640
gagtagaagt agatccaagc ttgattaagg atacttggca tcaagtttat agaagacatt
                                                                     2700
ttttaaaaac agctctaaac cattgtaacc tttgtcgaag aggtttttat tactaccaaa
                                                                     2760
ggcattttgt agattctgag ttggaatgca atgatgtggt cttgttttgg cgtatacagc
                                                                     2820
gcatgettge tateacegea aataetttaa ggcaacaact tacaaataet gaagttagge
                                                                     2880
gattagagaa aaatgttaaa gaggtattgg aagattttgc tgaagatggt gagaagaaga
                                                                     2940
ttaaattgct tactggtaaa cgcgttcaac tggcggaaga cctcaagaaa gttagagaaa
                                                                     3000
ttcaagaaaa acttgatgct ttcattgaag ctcttcatca ggagaaataa attaaaatcg
                                                                     3060
tactcataat cagctctgca tacatctgaa gaacaaaaac atcaacgtct tttgtccagc
                                                                     3120
ctctttttct tctgctgttc cacctttcta aacatacaat aaagtcatgg gataaaaata
                                                                     3180
atcgatgtat gttacgggcg ctttaaccat cagctgcctc tcgaatggaa gaacagtggt
                                                                     3240
aatggattaa catcctattt tgttgtacta aagtgacaaa tcggaataat ataattggta
                                                                     3300
tggccattag gttcagtcct tgaagataag aaacttgttc tctgtttgtt gtcttatttg
                                                                     3360
tggtggcact cgtttaatgg attaactgag gttgctcaat gttcagtttc ttttccagaa
                                                                     3420
atacaatgct aggtgttttg aaataaaact tatatagcaa ttgtttaaag ttatcaattg
                                                                     3480
tatataaaat cacagtagcc tgctaaatca ttgtatgtgt ctgtagtatt ctattcccag
                                                                     3540
aaactatttg accatgataa ttcagtttat attcaccaca tgaaagaaaa atgggtaaca
                                                                     3600
gaagaacccc taaaacaggt taatttggat tgtaacgttc agtgaaagaa atttcaaccc
                                                                     3660
ttcatagcca gcgaagaaat ttgccttgga agccaagtca gtaccagctt acctatttga
                                                                     3720
ttcagttgct gttttctcac tctctatatc catttgaaat tgatttattt tagatgttgt
                                                                     3780
atacttacgt taggetttet gttaatagtg gtttttetee tgttgacaga gccaccggat
                                                                     3840
tatgacacag gatgaggaag attaaggata atcaattgac taatttcatt tagaatatta
                                                                     3900
tcaaacattt caactaggta tcagaaaaag gctttctttc ataagactat tttaaataga
                                                                     3960
aattatttca acaattaaag taatgttgac catccccctg gcagctgaat aaagaaaaat
                                                                     4020
ttagttcaat ttattgcaat ttaattacaa tactaccttc acaacatttt catgtgtttt
                                                                     4080
aaataaatat tttttaattg gctaaaggac attcaagcaa agaaatgctt tctttactta
                                                                     4140
aaatgtctat ctcatttgct gccttttcac taagccttta ctttgttaat aaaagtgtcc
                                                                     4200
attgtgtgat gtttttgatt ttacagtttg ctaaatctta ttttcttgga gttgcttttt
                                                                     4260
ggtaacagcc ccattgctac tccccatttt attgttttac atcaatgcat gcttcgttgt
                                                                     4320
gatccctcaa gatgtaacac ttggtatgct cggttgagga tatgaaaaaa tacttccgaa
                                                                     4380
accaggaatt caatgtatgt ttgttttata ctgtttgata agaaaagtag gtccagcctt
                                                                     4440
aagcagcaca gatgcgctgg tagatgcata gtcaggaact ttttttattt cttttaggtc
                                                                     4500
tagggacagg agtgaataga aagggaggag agctctatta tgttctatac acagattagg
                                                                     4560
agatgacett actgggtaca eccetetaac cagtgettae aggttaatge atgttaatga
                                                                     4620
```

```
atatttttgc agttgtaaag cataacaatt acaactacac atctatttct aaagaataaa
                                                                  4680
acaggaccat atttatttac ttctgtcaac tatagaaaga aagaccttca gctgtatttc
                                                                  4740
cacagatttc tcccaaggaa aaggctaata ttagtcacta ctgttatcac atccctttgt
                                                                  4800
ataagtttta aaaagagatg gagggagatc ttcatttctt tgaggagatc agtattgtaa
                                                                  4860
cgtatgtgaa tagatgataa caattaatat tactaaaaqt cccacatgag agtcctgacg
                                                                  4920
coctotocaa tgccccacag taatgtgggc ttotttcatg ggtttttttt tottottttt
                                                                  4980
agetgatete ateetaagea tgetttattt tteettgaaa getaggtatt tateaactge
                                                                  5040
agatgttatt gaaagaaaat aaaattcagt ctcaagagta aaccctgtgt cttgtgtctg
                                                                  5100
tagttcaaaa gtcagaaatg attctaattt aaacaaaaag atattaaata tacagaagtt
                                                                  5160
5220
gacaaagctc tgtatggaag actgaacaac tgtaaataga tqatatccaa acttaatttg
                                                                  5280
gctaggactt caattttaaa aatcagtgta cctaggcagt gcacagcacg aaataagtgg
                                                                  5340
cccttgcagc ttccccgttt aacccactgt gctatagttg cgggtggaac agtcaacctt
                                                                  5400
totagtagtt tatgatattg coctetttgt atteccattt tetacagttt tttccgcaga
                                                                  5460
cttctttctg caaattattc agcctccaaa tgcaaatgaa tgatataaaa ataagtaggg
                                                                  5520
aaccatggca aagagtggtg cttcccaccc tcccaatgtg ggaatttgac gataggatga
                                                                  5580
gagtcagagt ataggtttaa aagataaaat ctttagttaa taattttgta tttatttatt
                                                                  5640
ctagatgtat gtatctgagg aaagaaatct ggtatttttg ctttccaata aaagaggggg
                                                                  5700
gggngggngg gaatttccaa aagtaatggt ttttctctca gttctctaaq ctqqtcctat
                                                                  5760
gttatagccc tagcagtatg gaaatgtgcc tttaaaaatat qccttacctt ttqaatqatc
                                                                  5820
atggctatat gttgttgaga tatttgaaac ttaccttggt tttcacttgt gcactgtgaa
                                                                  5880
tgaactttgt attattttt taaaaccttc acattacgtg tagatattat tgcaacttat
                                                                  5940
attttgcctg tgcttgatca aaggtcattt gtgtagatga gtaattaaaa aatatttaaa
                                                                  6000
tcacattata attctattat tggagagcat cttttaaatt tttttctgtt ttaacgaggg
                                                                  6060
aaagagaaac ctgtatacct agggtcatta tttgacccca tagtataacc agattcatgg
                                                                  6120
tctaacaagc tctcagtgtg gcttttctct gaatgcttga atttcacatg ccttgcattt
                                                                  6180
cacagttgta ctccatggtc aaccggtgct ttttttcaca tcgtggtact tgtcaaaaca
                                                                  6240
ttttgttatt ttccttggta aaatatataa aaaaggtttt cttaattttc aaaaaaaaa
                                                                  6300
aa
                                                                  6302
```

```
<210> 6111
<211> 6309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (74)...(5427)
<223> similar to gi5911999 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6111
gattgtttga atttgaaaac ggtaacatcg cagtgctgct cgcgggtctg gctagtcagg
                                                                       60
cgaagtttgc agaatggaat ctaattttaa tcaagaggga gtacctcgac catcttatqt
                                                                      120
ttttagtget gacccaattg caaggeette agaaataaat ttegatggea ttaagettga
                                                                      180
tetgteteat gaatttteet tagttgetee aaataetgag geaaacagtt tegaatetaa
                                                                     240
agattatete caggtttgte ttegaataag accatttaca cagtcagaaa aagaacttga
                                                                     300
gtctgagggc tgtgtgcata ttctggattc acagactgtt gtgctgaaag agcctcaatg
                                                                     360
catccttggt cggttaagtg aaaaaagctc aggggcagat gggcacagaa attcagtttt
                                                                     420
ttcccaggtt ttttgggccc agcaactaca cagaaggaat tctttcaggg ttqcattatq
                                                                     480
```

```
540
caccccagta aaagacctct tgaaaggaca gagtcgtctg atttttactt acgggctaac
                                                                      600
caattcagga aaaacatata catttcaagg gacagaagaa aatattcgca ttctgcctcg
                                                                      660
aactttgaat gtattatttg atagtcttca agaaagactg tatacaaaga tgaaccttaa
                                                                      720
accacataga tccagagaat acttaaggtt atcatcagaa caagagaaag aagaaattgc
tagcaaaagt gcattgcttc ggcaaattaa agaggttact gtgcataatg atagtgatga
                                                                      780
                                                                      840
tactctttat ggaagtttaa ctaactcttt gaatatctca gagtttgaag aatccataaa
                                                                      900
agattatgaa caagccaact tgaatatggc taatagtata aaattttctg tgtgggtttc
                                                                      960
tttctttgaa atttacaatg aatatattta tgacttattt gttcctgtat catctaaatt
ccaaaagaga aagatgctgc gcctttccca agacgtaaag ggctattctt ttataaaaga
                                                                     1020
                                                                     1080
tctacaatgg attcaagtat ctgattccaa agaagcctat agacttttaa aactaggaat
                                                                     1140
aaagcaccag agtgttgcct tcacaaaatt gaataatgct tccagtagaa gtcacagcat
attcactgtt aaaatattac agattgaaga ttctgaaatg tctcgtgtaa ttcgagtcag
                                                                     1200
tgaattatet ttatgtgate ttgetggtte agaacgaact atgaagacae agaatgaagg
                                                                     1260
                                                                     1320
tgaaaggtta agagagactg ggaatatcaa cacttettta ttgactetgg gaaagtgtat
taacgtcttg aagaatagtg aaaagtcaaa gtttcaacag catgtgcctt tccgggaaag
                                                                     1380
                                                                     1440
taaactgact cactattttc aagttttttt aatggtaaag ggaaaatttg tatgattgtc
                                                                     1500
aatatcagcc aatgttattt agcctatgat gaaacactca atgtattgaa gttctccgcc
attgcacaaa aagtttgtgt cccagacact ttaaattcct ctcaagagaa attatttgga
                                                                     1560
                                                                     1620
cctgtcaaat cttctcaaga tgtatcacta gacagtaatt caaacagtaa aatattaaat
gtaaaaagag ccaccatttc atgggaaaat agtctagaag atttgatgga agacgaggat
                                                                     1680
                                                                     1740
ttggttgagg agctagaaaa cgctgaagaa actgaagatt aggggaaact aaacttcttg
atgaagatct agataaaaca ttagaggaaa ataaggcttt cattagccac gaggagaaaa
                                                                     1800
gaaaactgtt ggacttaata gaagacttga aaaaaaaact gataaatgaa aaaaaggaaa
                                                                     1860
aattaacctt ggaatttaaa attcgagaag aagttacaca ggagtttact cagtattggg
                                                                     1920
ctcaacggga agctgacttt aaggagactc tgcttcaaga acgagagata ttagaagaaa
                                                                     1980
atgctgaacg tcgtttggct atcttcaagg atttggttgg taaatgtgac actcgagaag
                                                                     2040
aagcagcgaa agacatttgt gccacaaaag ttgaaactga agaagctact gcttgtttag
                                                                     2100
aactaaagtt taatcaaatt aaagctgaat tagctaaaac caaaggagaa ttaatcaaaa
                                                                     2160
ccaaagaaga gttaaaaaag agagaaaatg aatcagattc attgattcaa gagcttgaga
                                                                     2220
catctaataa gaaaataatt acacagaatc aaagaattaa agaattgata aatataattg
                                                                     2280
atcaaaaaga agatactatc aacgaatttc agaacctaaa gtctcatatg gaaaacacat
                                                                     2340
                                                                     2400
ttaaatgcaa tgacaaggct gatacatctt ctttaataat aaacaataaa ttgatttgta
                                                                     2460
atgaaacagt tgaagtacct aaggacagca aatctaaaat ctgttcagaa agaaaaagag
taaatgaaaa tgaacttcag caagatgaac caccagcaaa gaaagggtct atccatgtta
                                                                     2520
                                                                     2580
gttcagctat cactgaagac caaaagaaaa gtgaagaagt gcgaccgaac attgcagaaa
ttgaagacat cagagtttta caagaaaata atgaaggact gagagcattt ttactcacta
                                                                     2640
ttgagaatga acttaaaaat gaaaaggaag aaaaagcaga attaaataaa cagattgttc
                                                                     2700
                                                                     2760
attttcagca ggaactttct ctttctgaaa aaaagaattt aactttaagt aaagaggtcc
aacaaattca gtcaaattat gatattgcaa ttgctgaatt acatgtgcag aaaagtaaaa
                                                                     2820
atcaagaaca ggaggaaaag atcatgaaat tgtcaaatga gatagaaact gctacaagaa
                                                                     2880
gcattacaaa taatgtttca caaataaaat taatgcacac gaaaatagac gaactacgta
                                                                     2940
ctcttgattc agtttctcag atttcaaaca tagatttgct caatctcagg gatctgtcaa
                                                                     3000
                                                                     3060
atggttctga ggaggataat ttgccaaata cacagttaga ccttttaggt aatgattatt
                                                                     3120
tggtaagtaa gcaagttaaa gaatatcgaa ttcaagaacc caatagggaa aattctttcc
actictagtat tgaagctatt tgggaagaat gtaaagagat tgtgaaggcc tcttccaaaa
                                                                     3180
                                                                     3240
aaagtcatca gattgaggaa ctggaacaac aaattgaaaa attgcaggca gaagtaaaag
gctataagga tgaaaacaat agactaaagg agaaggagca taaaaaccaa gatgacctac
                                                                     3300
taaaagaaaa agaaactctt atacagcagc tgaaagaaga attgcaagaa aaaaatgtta
                                                                     3360
ctcttgatgt tcaaatacag catgtagttg aaggaaagag agcgctttca gaacttacac
                                                                     3420
aaggtgttac ttgctataag gcaaaaataa aggaacttga aacaatttta gagactcaga
                                                                     3480
aagttgaacg tagtcattca gccaagttag aacaagacat tttggaaaag gaatctatca
                                                                     3540
tcttaaagct agaaagaaat ttgaaggaat ttcaaggaca tcttcaggat tctgtcaaaa
                                                                     3600
acaccaaaga tttaaatgta aaggaactca agctgaaaga agaaatcaca cagttaacaa
                                                                     3660
ataatttgca agatatgaag catttacttc aattaaaaga agaagaagaa gaaaccaaca
                                                                     3720
ggcaagaaac agaaaaattg aaagaggaac tctctgcaag ctctgctcgt acccagaatc
                                                                     3780
ctgaacgcag atcttcagag gaaggaagaa gattatgctg acctgaaaga gaaactgact
                                                                     3840
gatgccaaaa agcagattaa gcaagtacag aaagaggtat ctgtaatgcg tgatgaggat
                                                                     3900
```

```
aaattactga ggattaaaat taatgaactg gagaaaaaga aaaaccagtg ttctcaggaa
                                                                     3960
ttagatatga agcagcggaa ccattcagca actcaaggag cagttaatta atcagaaagt
                                                                     4020
ggaagaaget atacaacagt atgagagage atgcaaagat ctaaatqtta aagagaaaat
                                                                     4080
aattgaagac atgcgaatga cactagaaqa acaggaacaa actcaggtag aacaggatca
                                                                     4140
agtgcttgga ggctaaattg gaggaagttg aaaggctggc cacagaattg gacagatgga
                                                                     4200
gggtaaaatg caatgatttg gaaaccaaaa acaatcaaag gtcaaataaa gaacatgaga
                                                                     4260
acaacacaga tgtgcttgga aagctcacta atcttcaaga tgagttacag gagtctgaac
                                                                     4320
agaaatataa tgctgataga aagaaatggt tagaagaaaa aatgatgctt atcactcaag
                                                                     4380
cgaaagaagc agagaatata cgaaataaag agatqaaaaa atatqctqaq qacaqqqaqc
                                                                     4440
gtttttttaa gcaacagaat gaaatggaaa tactgacagc ccagctgaca gagaaagata
                                                                     4500
gtgaccttca aaagtggcga gaagaacgag atcaactggt tgcagcttta gaaatacagc
                                                                     4560
taaaagcact gatatccagt aatgtacaga aagataatga aattgaacaa ctaaaaaqga
                                                                     4620
tcatatcaga gacttctaaa atagaaacac aaatcatgga tatcaagccc aaacgtatta
                                                                     4680
gttcagcaga tcctgacaaa cttcaaactg aacctctatc gacaagtttt gaaatttcca
                                                                     4740
gaaataaaat agaggatgga tctgtagtcc ttgactcttg tgaagtgtca acagaaaatg
                                                                     4800
atcaaagcac tcgatttcca aaacctgagt tagagattca atttacacct ttacaqccaa
                                                                     4860
acaaaatggc agtgaaacac cctggttgta ccacaccagt gacagttaag attcccaagg
                                                                     4920
ctcggaagag gaagagtaat gaaatggagg aggacttggt gaaatgtgaa aataagaaga
                                                                     4980
atgctacacc cagaactaat ttgaaatttc ctatttcaqa tqataqaaat tcttctqtca
                                                                     5040
aaaaggaaca aaaggttgcc atacgtccat catctaagaa aacatattct ttacggagtc
                                                                     5100
aggcatccat aattggtgta aacctggcca ctaagaaaaa agaaqqaaca ctacaqaaat
                                                                     5160
ttggagactt cttacaacat tctccctcaa ttcttcaatc aaaaqcaaaq aaqataattq
                                                                     5220
aaacaatgag ctcttcaaag ctctcaaatg tagaagcaag taaagaaaat gtgtctcaac
                                                                     5280
caaaacgagc caaacggaaa ttatacacaa gtgaaatttc atctcctatt gatatatcaq
                                                                     5340
gccaagtgat tttaatggac cagaaaatga aggagagtga tcaccaqatt atcaaacqac
                                                                     5400
gacttcgaac aaaaacagcc aaataaatca cttatggaaa tgtttaatat aaattttata
                                                                     5460
gtcatagtca ttggaacttg catcctgtat tgtaaatata aatgtatata ttatgcatta
                                                                     5520
aatcactctg catatagatt gctgttttat acatagtata attttaattc aataaatgag
                                                                     5580
tcaaaatttg tatattttta taaggetttt ttataatage ttetttcaaa etgtatttee
                                                                     5640
ctattatctc acacattgga tcagtgaaga tcctaggaaa gaggctgtta ttctcattta
                                                                     5700
ttttgctata caggatgtaa taggtcaggt atttggttta cttatattta acaatgtctt
                                                                     5760
atgaattttt tttactttat ctgttataca actgatttta catatctgtt tggattatag
                                                                     5820
ctaggatttg gagaataagt gtgtacagat cacaaaacat gtatatacat tatttagaaa
                                                                     5880
agateteaag tetttaatta gaatgtetea ettattttgt aaacattttg tgggtacata
                                                                     5940
ggacatgtat atatttacgg ggtatgtgag atgttttgac acaggcatgc aatgtgaaat
                                                                     6000
acctgtatca tggagaatga ggtatccatc ccctcaagca tttttccttt gaattacaga
                                                                     6060
taatccaatt acattcttta gatcatttaa aaatatacaa gtaagttatt attgattata
                                                                     6120
gtcactctat tgtgctatca gatattaaat cattctttt atcttatttq tttttqtacc
                                                                     6180
cattaaccat ccccacctcc ccctgcaacc gtcagtaccc ttaccagcca ctggtaacca
                                                                     6240
ttcttctact ctgtatgccc atgaggtcaa ttgattttat ttttagatcc cataaattcg
                                                                     6300
acgcggccg
                                                                     6309
```

```
<210> 6112
<211> 2852
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2704)...(870)
<223> similar to gi5817153 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6112 tttttttttt ttccaggaaa aacgacgttt tattttcata aatactcctg ctctcactca 60 120 cacactgacc ccacttctga ccacggacag atggatggac agacgtaaga cacccatagg 180 aggccccagc agaggccaat gaatgaagga gacacaccga gaactctagg tgccccacag 240 cccctcgctg gggccatggg cctctggcat tacccttgag cccccacagt ccctcagggg 300 geccaatggc aaagggaaac ccccaggagt acgggccagg tgaggttecc ccagcctggc 360 cccctgaggc tgtgaccaca gggccaatcc ggaagaaaag cagagtcaaa ccacacca 420 gagtgcaaat agctgggggt gtaggcgtca cccccagtc actgggttcc tatggaggag gcctaagctg gtccccagct ccagcatggc ccccgagtta tggctgggcc ttcccataag 480 gcataagaga caggtgggga agaccccacc ccagctgggg ttggggctgg gcctgaggtc 540 600 etggeeette cecaacaget gtgetteete eccatgacee aagttettee aaggetacae 660 agecectece tetecaggie eeggigatgg agaceceage ggeacaaace caggeecage 720 etectactgg gtttggetca geaggggegg ggeeggagea ggagggggaa gagteaettg aggcctacag gggtgtgggg agaagcacca ggcctggggg tgaatggcca tgggcaacaa 780 840 agggtgtcct tggccaccaa tgcctccctc caggctggac agtgaccggt ccctctgccc 900 ettectetee ccageceete tgttetagag getaceecag gttteaggtg gggggaaetg 960 gtccacatcc cccatctcgt tgtaggtctg gtcacccatg gtgaaggtga gcttgtagcg 1020 gaggcgaacc ttctccttct gggggttggc aagcagcagg acctgggtga ttgctgaggg 1080 gtggacgatg gggttaaaag ctggcagctc cgtgcccgag ggtggctgca gcttcacctt 1140 cataaccttg gggacagctg actggaacac gatgttgcgg atgggctggg gggcggtgct 1200 cagcatggaa accaccacca ccagcacgtc ggagcgccct ggcagtgggt cccgggcaaa 1260 atggaagagg atgcggaagc cgtgctggtc atacacagtc acgggcagga tgttgctggg 1320 tttgatggac tccaggggca cagtgatgct ggccagtgag agctcggttg gtacgggctg 1380 ctgcggaggc ctggggggct ctgggggacac ggtgtggaga aggctggtgg cgctggagct gggggagctg cagctgctgc tcttattctg caggtcccgg agtgtgagcc ggggggttgg 1440 ctgctgcttc tcccaccgca cttgctggga ttccgggggc agcgactgct gcaggagggt 1500 cttccccagg aggtctaggt cgtccagacc gctgcttgct ggcagggatg tctgcgctgg 1560 gggtcggctt tccatactgg gggcctgggc cagagcaggg gctgggggct cagtggcatc 1620 cgacgactgg aagctgttcc atccggtacc atccaggctt gggcctgaag ggggtgtggg 1680 1740 gtcactgagg cccagagaca tgagctcgtc gtcaagcagg gaaactgagg cactgggctg 1800 ctcagggctg gcctgctcgc cagggcgggt gggcatagct gggtaggtgg tgcccgcagg 1860 cgggagatcc aggcctgaga gatccagcag ggccgaggtg ctcccaggga tggagccggc tgtggcatca ccgttgacct cctcaccccg caccagctgc ttatacaggt tgatcacctg 1920 ggtgaggttg tcattggcct gcaggatctc cgctaaggcc tcaatcattg tcctctgtgt 1980 caactegeec agteggaaag agegtgggee geateegete acagegetgg taacagttee 2040 ttegatgagg teetegetge tgeeagetge tgegeegeee tggetgtgge teateaceat 2100 ctccgtgagc agtttcacat tgttgttcac ctcctcgatg gcattcaccc tcttcgagat 2160 ettetecate egettetggt ceteetgeac catetetttg atgagettat tggetgegeg 2220 gaggtetteg ggatgggage tetteageag gegggeeage atettggatt teteeteate 2280 ttcaaagatc acattcttcg gccgtggagg aggaagggga aaggtagtgt catctggaag 2340 cttggggtcg gactttacaa tccccctgct tctttagcat ctggtaggcc tctgcgattt 2400 taacctcctc gggcaggccc actgtccagc tgtagaggag ctccaagatc ttgttcttca 2460 cetteteega tgteegagag eccagataet tgggagaeae gaeettgatg agetegttga 2520 gaaageggaa ettgeceaet tegtegtgga acegettgee geagetette atgeatgttt 2580 ccagcaccgt caaggcctgg atcgcctccc actcctgtgg ggactggatc ttgtgggcca 2640 gcagccgggt ggcgagtgga ggcccctcaa agtcctcgtt gagctgctcg cagaagccgt 2700 tgatgctggc ccagtcgagc tccttgttca gggggttcgt ggctctattc gccgtcccag 2760 gggtcatggc ccagggatcc gacaggtggg cggcgcccgc tcccaccgct ggaccgcgcc 2820 ggggccgggg tcctccatcg ctccagacga aa 2852

```
<210> 6113
<211> 3468
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (468)...(2775)
<223> similar to gil296666 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6113 ccgacgattt cgtccctgtt ccgcgagcat acgtcatcgt tctcgctttc cggtagctaa 60 ggcgatcagc gggacttccc actgagacga gcggatgtca tattgtatca gggcgaacct 120 ctgaggagcg ctggctgcgc ttaagcaacg gtgcggcagg cgccggggtt ttctgaaaca 180 240 gaaacgttta ggggtgggga aacgtgttcc gaggaactct cgttttgaag tgcgagatac acctgtcttg ccctgttcca agatggtggc agagcttctc tgagtctctc gcttcctcca 300 gtccgtcgga gaagcgctct ttgattggcc agtggacagc gccgtggcat gacgcgctgg 360 ggcgctggcc aatcggttga gagctgagct ggacttggcg gtgggagccg gagcctgctt 420 gttgcagctg tgggtgagga cggctccggc cagttccctt ttagactatg gcgacatacc 480 540 tggagttcat ccagcagaat gaagaacggg atggtgtgcg ttttagttgg aacgtgtggc 600 ettecageeg getggagget acaagaatgg ttgtaceeet ggettgtete ettacteett tgaaagaacg tccagaccta cctcctgtac aatatgaacc tgtgctttgc agcaggccaa 660 cttgtaaagc tgttctcaac ccactttgtc aggttgatta tcgagcaaaa ctttgggcct 720 gtaatttctg ttttcaaaga aatcagtttc ctccagctta tggaggcata tctgaggtga 780 atcaacctgc cgaattgatg ccccagtttt ctacaattga gtacgtgata cagcgaggtg 840 ctcagtcccc tctgatcttt ctctatgtgg ttgacacatg cctggaggaa gatgaccttc 900 aagcactcaa agagtccctg cagatgtccc tgagtcttct tcctccagat gctctggtgg 960 gtctgatcac atttggaagg atggtgcagg ttcatgagct aagctgtgaa ggaatctcca 1020 aaagttatgt cttccgaggg accaaggatt taactgcaaa gcaaatacag gatatgttgg 1080 gcctgaccaa gccagccatg cccatgcagc aagcacgacc tgcacaacca caggagcacc 1140 cttttgcttc aagcagattt ctgcagccct gttcacaaga ttgatatgaa cctcactgat 1200 cttcttgggg agctacagag ggacccatgg ccagtaactc aggggaagag acctttgcga 1260 tccactggtg tggctttgtc catttgctgt tggcttgctg gagggcactt ttccaaacac 1320 agggagccag gatcatgctg tttactggag gtccccctac ccaagggcct ggcatggtgg 1380 ttggagatga attaaagatt cctattcgtt cttggcatga tattgagaaa gataatgcac 1440 gattcatgaa aaaggcaacc aagcactatg agatgcttgc taatcgaaca gctgcaaatg 1500 gtcactgcat tgatatttat gcttgtgccc ttgatcaaac tggacttttg gagatgaagt 1560 gttgtgcaaa tcttactgga ggctacatgg taatgggaga ttctttcaac acttctctct 1620 tcaagcagac attccaaaga atctttacta aagattttaa tggagatttc cgaatggcat 1680 ttggtgctac tttggacgta aagacctctc gggaactgaa gattgcagga gccattggtc 1740 catgcatatc totgaatgtg aaaggaccgt gtgtgtcaga aaatgagctt ggtgttggtg 1800 gcacgagtca gtggaaaatc tgtggcctag atcctacatc tacacttggc atctattttg 1860 aagttgtcaa tcagcacaac accccgatcc cccaaggagg cagaggagcc atccagtttg 1920 teacgeatta teageactee ageacceaga gacgeateeg egtgaceace ategecegaa 1980 attgggcaga tgtacagagt cagctcaggc acatagaagc agcatttgac caggaggctg 2040 cggcagtgtt gatggcacgg cttggggtgt tccgagcgga gtcagaggag gggcccgatg 2100 tgctccggtg gctggaccga caactcatcc gactgtgtca aaagtttgga cagtataaca 2160 aagaagaccc cacttctttt aggttatcag attccttttc tctatatcct cagtttatgt 2220 tecatetgag aagateteea tttetteaag tgtttaacaa cagteetgat qaqteqteat 2280 attacagaca teattttgee eggeaggace tgacecagte ceteateatg atecagecea 2340 ttctctactc ttactccttt catgggccac cagagccagt actcttggat agcagcagca 2400 ttctagctga cagaattttg ctgatggata ctttctttca aattgtcatt tatcttggtg 2460 agaccatage ceagtggegt aaagetgget accaggacat gecegagtat gaaaacttea 2520

```
2580
agcacettet geaggeacea etggatgatg etcaagaaat tetgeaagea egetteeega
tgccacqtta catcaacacq gagcatggag gcagtcaggc tcgattcctt ttgtccaaag
                                                                    2640
tgaacccatc tcagacacac aataacctgt atgcttgggg acaggaaact ggagcaccca
                                                                    2700
                                                                    2760
tcctaactga tgatgttagc ctgcaggtgt tcatggacca tttgaagaag ctggctgtct
ccagtgcctg ttaagctgag gatacaacca ggaaatgcaa cggtgtcaga ttgtgttcaa
                                                                    2820
                                                                    2880
aatgtctaga aaggcttgat aacattcctg ttacttttct agcagatttt aacaaataat
                                                                    2940
caaggacatt ttatatgtaa ctctttagat tataatttat ttgtattcct gtctttgtcc
tttttcttgc actataaaat tataaggtca taaatgtttt ggtacttgta gatgtttatg
                                                                    3000
tgctttttgt atcctaactt ttagaatcta aataaaatca gaggtaatgt attttggcag
                                                                    3060
cttgtttagg tgagaatctt aatgatcata aaaggaaata aatctagatg cagaaagtac
                                                                    3120
tggctaaaat attgctaata caaatgtgat ttcctgaggt ctctqtgtga gtgtqtatgt
                                                                    3180
gttttaagtg acttccttaa gaggtgtttc cctgaaccct aattccccat aattaaagta
                                                                    3240
atgtatatgc caggatcaaa atgaaacaaa tataccttat ccctaaagag ctcataacaa
                                                                    3300
ataagttacc tecactetat aaacteagae etactttttg aagataactg ettttaacet
                                                                    3360
ctccttacaa gatttttgtt gttgatgtat ttaattttag cccatgtctc aattctcatt
                                                                    3420
ttcaaagaaa tcaatatatt aatatacctt tggtcaaaaa aaaaaaaa
                                                                    3468
```

```
<210> 6114
<211> 1082
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (784)...(123)
<223> similar to gi556642 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6114
tttttttttt ttcatccaac aagaagccat aactttattt atgatagaaa cagtacaaat
                                                                       60
ttcaaaccaa gctgcagtta ctcctttgag acaccaaaaa aagttgcttc catatggtta
                                                                      120
cattgttaat tecataateg catttacaat atcattactg ttgttettea gggeteggae
                                                                      180
tgcctttgct ctcgacacat ttgcttgtga catgaccaat tctatqtcct taacttctac
                                                                      240
acctgtttca tcgacctctt cctcttcact ctcctcttgt acagttggag tctgtgtgtt
                                                                      300
ttettgaatg tttgagaeag etteacettg aaetttgaat tteteageag etgetagttg
                                                                      360
tgcttgctgg gataaatctt cgatcttggc ttccccaaaa actatgtaag tatctqaaqc
                                                                      420
agggetettg tagacatetg gttttgtgat gacaaagagg atattettag attteeggat
                                                                      480
agtgacteta gtaacteetg taacetgeeg aagaceeagt ttggacatag cetteegtge
                                                                      540
ettettttea eteegaetet gttttgettt aetgaetggt tetteatega ttteagetge
                                                                      600
tgccgccagc tgggcttgtt gtgtggttgc ctgggtggaa tcctgttctt caagctctgg
                                                                      660
tactgattca tcactgtcag attctgttcc agaccctgag atgagaaaca actgtctcag
                                                                      720
cctggggctg cggcaactcc tgctctgtag cagggacggt ttctgtggct tcgccgggca
                                                                      780
tttccttttc tggatcctgt gaagcagttc ccaaaacaag acgcactcct cttccqccct
                                                                      840
caacactgca actgctccca tetetgcagg cteggattet gggccegcec cqcaqccett
                                                                      900
ctaccetget tttgccagga caccaacege agaceceatt ttgtccqqaq qeccaqqqqe
                                                                      960
gagtaggaac cctgtggccc agtaaagcct ccaactctcc ttaactctca gtccccgggg
                                                                     1020
cggcttagcc cgaaagaaag gcggatggct gcggatagac agtagcggca cagaaagtac
                                                                     1080
tt
                                                                     1082
```

```
<210> 6115
<211> 2949
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (51)...(2666)
<223> similar to gi458555 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6115 cggacgcgtg ggggagtgct cctcaggagc cagccccacc cttagaaaag atgttttcca 60 tgaggategt etgeetggte etaagtgtgg tgggeacage atggaetgea gatagtggtg 120 aaggtgactt tetagetgaa ggaggaggeg tgegtggeee aagggttgtg gaaagacate 180 aatctgcctg caaagattca gactggccct tctgctctga tgaagactgg aactacaaat 240 gcccttctgg ctgcaggatg aaagggttga ttgatgaagt caatcaaqat tttacaaaca 300 gaataaataa gctcaaaaat tcactatttg aatatcagaa gaacaataag gattctcatt 360 cgttgaccac taatataatg gaaattttga gaggcgattt ttcctcagcc aataaccgtg 420 ataataccta caaccgagtg tcagaggatc tgagaagcag aattgaagtc ctgaagcgca 480 aagtcataga aaaagtacag catatccagc ttctgcagaa aaatgttaga gctcagttgg 540 ttgatatgaa acgactggag gtggacattg atattaagat ccgatcttgt cgagggtcat 600 gcagtagggc tttagctcgt gaagtagatc tgaaggacta tgaagatcag cagaagcaac 660 ttgaacaggt cattgccaaa gacttacttc cctctagaga taggcaacac ttaccactga 720 taaaaatgaa accagttcca gacttggttc ccggaaattt taagagccag cttcagaagg 780 tacccccaga gtggaaggca ttaacagaca tgccgcagat gagaatggag ttagagagac 840 ctggtggaaa tgagattact cgaggaggct ccacctctta tggaaccgga tcagagacgg 900 aaagccccag gaaccctagc agtgctggaa gctggaactc tgggagctct ggacctggaa 960 gtactggaaa ccgaaaccct gggagctctg ggactggagg gactgcaacc tggaaacctg 1020 ggagetetgg acetggaagt actggaaget ggaactetgg gagetetgga actggaagta 1080 ctggaaacca aaaccctggg agccctagac ctggtagtac cggaacctgg aatcctggca 1140 gctctgaacg cggaagtgct gggcactgga cctctgagag ctctgtatct ggtagtactg 1200 gacaatggca ctctgaatct ggaagtttta ggccagatag cccaggctct gggaacgcga 1260 ggcctaacaa cccagactgg ggcacatttg aagaggtgtc aggaaatgta agtccaggga 1320 caaggagaga gtaccacaca gaaaaactgg tcacttctaa aggagataaa gagctcagga 1380 ctggtaaaga gaaggtcacc tctggtagca caaccaccac gcgtcgttca tgctctaaaa 1440 ccgttactaa gactgttatt ggtcctgatg gtcacaaaga agttaccaaa gaagtggtga 1500 cctccgaaga tggttctgac tgtcccgagg caatggattt aggcacattg tctggcatag 1560 gtactctgga tgggttccgc cataggcacc ctgatgaagc tgccttcttc gacactgcct 1620 caactggaaa aacattccca ggtttcttct cacctatgtt aggagagttt gtcagtgaga 1680 ctgagtctag gggctcagaa tctggcatct tcacaaatac aaaggaatcc agttctcatc 1740 accetgggat agetgaatte cetteeegtg gtaaatette aagttacage aaacaattta 1800 ctagtagcac gagttacaac agaggagact ccacatttga aagcaagagc tataaaatgg 1860 cagatgaggc cggaagtgaa gccgatcatg aaggaacaca tagcaccaag agaggccatg 1920 ctaaatctcg ccctgtcaga gactgtgatg atgtcctcca aacacatcct tcaggtaccc 1980 aaagtggcat tttcaatatc aagctaccgg gatccagtaa gattttttct gtttattgcg 2040 atcaagagac cagtttggga ggatggcttt tgatccatca aagaatggat ggatcactga 2100 attttaaccg gacctgggca agactacaag agaggtttcg gcagcctgaa tgacgagggg 2160 gaaggagaat totgggotag ggoaatgact tacttcact tacttaaccc aaagggggot 2220 tctgttctta ggggttggaa ttaggaggga ctggggctgg gaatgaagct tatggcagaa 2280 tatcacttcc gggtaggctc tgaggctgaa ggctatgccc tccaagtttc ctcctatgaa 2340

```
ggcactgcgg gtaatgctct gattgagggt tccgtagagg aaggggcaga gtacacctct
                                                                     2400
cacaacaaca tgcagttcag cacctttgac agggattgca gaccagtggg aagagaactg
                                                                     2460
                                                                     2520
tgcagaagtc tatgggggag gctggtggta taataactgc caagcagcca atctcaatgg
                                                                     2580
aatctactac cctgggggct cctatgaccc aaggaataac agtccttatg agattgagaa
tggagtggtc tgggtttcct ttagaggggc agattattcc ctcagggctg ttcgcatgaa
                                                                     2640
                                                                     2700
aattaggccc cttgtgaccc aataggctga agaagtggga atgggagcac tctgtcttct
ttgctagaga agtggagaga aaatacaaaa ggtaaagcag ttgagattct ctacaaccta
                                                                     2760
aaaaattcct aggtgctatt ttcttatccc tttgtactgt agctaaaatg tacctgagac
                                                                     2820
                                                                     2880
atattagtct ttgaaaaata aagttatgtt aaggtttttt ttatctttaa atagctctgt
ggggttttaa ccatttttat taaaggttta cccaaggggc cattcagtac catcagggaa
                                                                     2940
                                                                     2949
agtgggcag
```

```
<210> 6116
<211> 3156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (383)...(1899)
<223> similar to gi36619 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6116 gegeggeggt tgggeegttg getgttegge eetgggatee geegeeacte egegateaga 60 cegetetgtg cegegageeg cegtgageac teggatteaa geeggegeea aegagteegg 120 gggcatcgcc cgcagcggcc aagctcatgg ccggctgagc gggacgccgc ctccgcctca 180 gccaccgccg ccgccggcgc ctcctcctcc tcagccggcg gcggcccggg cccagcaacc 240 atggctgaag actactggga cgggcgcctg cggcgaacag gaggagaagg aggtcgcgcg 300 gcctcatccc gggccgccgc cccaggcgcc gccgcgccgg ccccgcggct ctgaggttgc 360 tegegegeee eegeegateg ceatggateg gatgaagaag atcaaaegge agetgteaat 420 gacactecga ggtggccgag gcatagacaa gaccaatggt gcccctgagc agataggcct 480 ggatgagagt ggtggtggtg geggeagtga ecetggagag geeeceacae gtgetgetee 540 tggggaactt cgttctgcac ggggcccact cagctctgca ccagagattg tgcacgagga 600 cttgaagatg gggtctgatg gggagagtga ccaggcttca gccacgtcct cggatgaggt 660 geagteteca gtgagagtge gtatgegeaa ceateeecea egeaagatet eeactgagga 720 catcaacaag cgcctatcac taccagctga catccggctg cctgagggct acctggagaa 780 gctgaccctc aatagcccca tctttgacaa gcccctcagc cgccgcctcc gtcgtgtcag 840 cctatctgag attggctttg ggaaactgga gacctacatt aagctggaca aactgggcga 900 gggtacctat gccaccgtct acaaaggcaa aagcaagctc acagacaacc ttgtggcact 960 caaggagatc agactggaac atgaagaggg ggcaccctgc accgccatcc gggaagtgtc 1020 cctgctcaag gacctcaaac acgccaacat cgttacgcta catgacatta tccacacgga 1080 gaagtccctc accettgtct ttgagtacct ggacaaggac ctgaagcagt acctggatga 1140 ctgtgggaac atcatcaaca tgcacaacgt gaaactgttc ctgttccagc tgctccgtgg 1200 cetggeetae tgecacegge agaaggtget acacegagae etcaageece agaacetget 1260 catcaacgag aggggagagc tcaagctggc tgactttggc ctggcccgag ccaagtcaat 1320 cccaacaaag acatactcca atgaggtggt gacactgtgg taccggcccc ctgacatcct 1380 gettgggtcc acggactact ccactcagat tgacatgtgg ggtgtgggct gcatcttcta 1440 tgagatggcc acaggccgtc ccctctttcc gggctccacg gtggaggaac agctacactt 1500 catcttccgt atcttaggaa ccccaactga ggagacgtgg ccaggcatcc tgtccaacga 1560

```
1620
1680
ccgacttgat agcgacgggg ccgacctcct caccaagctg ttgcagtttg agggtcgaaa
                                                                  1740
teggatetee geagaggatg ceatgaaaca tecattette eteagtetgg gggageggat
ccacaaactt cctgacacta cttccatatt tgcactaaag gagattcagc tacaaaagga
                                                                  1800
ggccagcctt cggtcttcgt cgatgcctga ctcagccatc tgctctgctt tcccccacag
                                                                  1860
gcaggccagc tttccgcgtg gtggacaccg agttctaagc cacagaccga ggccccagca
                                                                  1920
                                                                  1980
ggcagcggct ggagggatgc cacacccctc acagggcagc ccccaactac atcttccctg
cttactetet geetaeetge etgageeatg tteacetgee eacttgteee etgetgeetg
                                                                  2040
                                                                  2100
cccaaacacc ccaccattgg cctgtcaacc cacccattgg cctgtctgct gggtgctaac
                                                                  2160
aaagetetea teacteette aettegtetg tetgtetetg tettggtagt tgeeggtgga
                                                                  2220
cagcatggcc gtgccagcct cccacactga ggccaggtct accccccatc ataccagccc
                                                                  2280
ccaggaccac taccccacgg ccagccaggg gtccagagct agcccaggct ggggatctcg
actcagacaa gatggtgaca atgccttgag tctgaggcat cctctgcctg ctttcctgcc
                                                                  2340
                                                                  2400
tgccccacct gcctcatatt gtgtgggcct ttttttgttt gtttcattca ttgtttttt
tttttaaata atttaaaagg aaatttttgt ttttttaaa ggcaatattt ttgtatacag
                                                                  2460
                                                                  2520
actggctggg ccccccccc tgcggggggc cctcccacag tattttgggc aaggaacccc
                                                                  2580
tgctcccacc ctttcagaga cggggacaca gcccctattt ggaaccctga tcatcacaag
                                                                  2640
aacctgggaa ttggctatgg gaaagcatgc cacagccact cgccttccta cccccgcccg
                                                                  2700
ccatccccaa gttgcaaggg ggatctgggg actaccaaga gactctggga aatggacaag
gtggggggcc ccactettte tetactgcag taccgtaget ggggcctccc tteettetca
                                                                  2760
gggteteccc cageeccagt eccetttget ecceatecec aacteggttg ettgtttggg
                                                                  2820
gttaggggcc ccttgccaag gaactgacca agcttcagcg aggagccaat aatgtgcata
                                                                  2880
tgtgcacaag cagggttggg ggagggggt gtgaggggtt gtgccccagg tgttgcccc
                                                                  2940
tatctcctgg ggagggtgag gcagggcagg gacagtctcc agggtcagtc cctggatggg
                                                                  3000
tggttacete ceetteetee accetaagee etggggeeet gaaatggggt gggagggeag
                                                                  3060
gggtgggagc cctcctagtg ggtttggggg gttgggttcc tgaatgcacc ataatcgctg
                                                                  3120
tatgaaatat taaaaagtct aaagtgaaaa aaaaaa
                                                                  3156
```

```
<210> 6117
<211> 5470
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5471)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (27)...(4394)
<223> similar to gi2230888 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6117

tttcgtgggc tgtaggcgcc aaggccatgt ccgactcgtg ggtcccgaac tccgcctcgg 60
gccaggaccc agggggccgc cggagggcct gggccgagct gctggcggga agggtcaaga 120
gggaaaaata taatcctgaa agggcacaga aattaaagga atcagctgtg cgcctcctgc 180
gaagccatca ggacctgaat gcccttttgc ttgaggtaga aggtccactg tgtaaaaaat tgtctctcag caaagtgatt gactgtgaca gttctgaggc ctatgctaat cattctagtt 300
```

```
360
catttatagg ctctgctttg caggatcaag cctcaagget gggggttccc gtgggtattc
                                                                     420
teteageegg gatggttgee tetagegtgg gacagatetg caeggeteea geggagaeea
                                                                     480
gtcaccctgt gctgctgact gtggagcaga gaaagaagct gtcttccctg ttagagtttg
                                                                     540
ctcagtattt attggcacac agtatgttct cccgtctttc cttctgtcaa gaattatgga
aaatacagag ttctttgttg cttgaagcgg tgtggcatct tcacgtacaa ggcattgtga
                                                                     600
geetgeaaga getgetggaa ageeateeeg acatgeatge tgtgggateg tggetettea
                                                                     660
                                                                     720
gqaatctgtg ctgcctttgt gaacagatgg aagcatcctg ccagcatgct gacgtcgcca
                                                                     780
gggccatgct ttctgatttt gttcaaatgt ttgttttgag gggatttcag aaaaactcag
                                                                     840
atctgagaag aactgtggag cctgaaaaaa tgccgcaggt cgcggttgat gtactgcaga
                                                                     900
gaatgetgat ttttgcactt gacgetttgg etgetggagt acaggaggag tectecacte
                                                                     960
acaagatcgt gaggtgctgg ttcggagtgt tcagtggaca cacgcttggc agtgtaattt
                                                                    1020
ccacagatcc tctgaagagg ttcttcagtc ataccctgac tcagatactc actcacagcc
ctgtgctgaa agcatctgat gctgttcaga tgcagagaga gtggagcttt gcgcggacac
                                                                    1080
accetetget caccteactg taccgeagge tetttgtgat getgagtgea gaggagttgg
                                                                    1140
ttggccattt gcaagaagtt ctggaaacgc aggaggttca ctggcagaga gtgctctcct
                                                                    1200
ttgtgtctgc cctggttgtc tgctttccag aagcgcagca gctgcttgaa gactgggtgg
                                                                    1260
cgcgtttgat ggcccaggca ttcgagagct gccagctgga cagcatggtc actgcgttcc
                                                                    1320
                                                                    1380
tggttgtgcg ccaggcagca ctggagggcc cctctgcgtt cctgtcatat gcagactggt
teaaggeete etttgggage acacgagget accatggetg cageaagaag geeetggtet
                                                                    1440
tcctgtttac gttcttgtca gaactcgtgc cttttgagtc tccccggtac ctgcaggtgc
                                                                    1500
acatteteca eccaeecetg gtteeeggea agtacegete ecteeteaca gaetacatet
                                                                    1560
cattggccaa gacacggetg gccgacctca aggtttctat agaaaacatg ggactctacg
                                                                    1620
aggatttgtc atcagctggg gacattactg agccccacag ccaagctctt caggatgttg
                                                                    1680
aaaaggccat catggtgttt gagcatacgg ggaacatccc agtcaccgtc atggaggcca
                                                                    1740
geatatteag gaggeettae taegtgteee aetteeteee egeeetgete acacetegag
                                                                    1800
tgctccccaa agtccctgac tcccgtgtgg cgtttataga gtctctgaag agagcagata
                                                                    1860
aaatcccccc atctctgtac tccacctact gccaggcctg ctctgctgct gaagagaagc
                                                                    1920
cagaagatgc agccctggga gtgagggcag aacccaactc tgctgaggag cccctgggac
                                                                    1980
ageteacage tgeactggga gagetgagag cetecatgae agaeeeeage cagegtgatg
                                                                    2040
ttatatcggc acaggtggca gtgatttctg aaagactgag ggctgtcctg ggccacaatg
                                                                    2100
aggatgacag cagcgttgag atatcaaaga ttcagctcag catcaacacg ccgagactgg
                                                                    2160
agccacggga acacatggct gtggacctcc tgctgacgtc tttctgtcag aacctgatgg
                                                                    2220
etgeeteeag tgtegeteee eeggagagge agggteeetg ggetgeeete ttegtgagga
                                                                    2280
ccatgtgtgg acgtgtgctc cctgcagttgc tcacccggct ctgccagctg ctccgtcacc
                                                                    2340
agggcccgag cctgagtgcc ccacatgtgc tggggttggc tgccctggcc gtgcacctgg
                                                                    2400
gtgagtccag gtctgcgctc ccagaggtgg atgtgggtcc tcctgcacct ggtgctggcc
                                                                    2460
ttcctgtccc tgcgctcttt gacagcctcc tgacctgtag gacgagggat tccttgttct
                                                                    2520
tetgeetgaa attttgtaca geageaattt ettaetetet etgeaagttt tetteecagt
                                                                    2580
cacgagatac titgtgcage tgcttatete caggeettat taaaaagttt cagtteetea
                                                                    2640
tgttcagatt gttctcagag gcccgacagc ctctttctga ggaggacgta gccagccttt
                                                                    2700
cctggagacc cttgcacctt ccttctgcag actggcagag agctgccctc tctctctgga
                                                                    2760
cacacagaac cttccgagag gtgttgaaag aggaagatgt tcacttaact taccaagact
                                                                    2820
ggttacacct ggagctggaa attcaacctg aagctgatgc tctttcagat actgaacggc
                                                                    2880
aggacttcca ccagtgggcg atccatgagc actttctccc tgagtcctcg gcttcagggg
                                                                    2940
gctgtgacgg agacctgcag gctgcgtgta ccattcttgt caacgcactg atggatttcc
                                                                    3000
accaaagctc aaggagttat gaccactcag aaaattctga tttggtcttt ggtggccgca
                                                                    3060
caggaaatga ggatattatt tccagattgc aggagatggt agctgacctg gagctgcagc
                                                                    3120
aagacctcat agtgcctctc ggccacaccc cttcccagga gcacttcctc tttgagattt
                                                                    3180
tecgeagacg getecagget etgacaageg ggtggagegt ggetgecage etteagagae
                                                                    3240
agagggaget getaatgtac aaacggatec teeteegeet geettegtet gteetetgeg
                                                                    3300
gcagcagctt ccaggcagaa cagcccatca ctgccagatg cgagcagttc ttccacttgg
                                                                    3360
tcaactctga gatgagaaac ttctgctccc acggaggtgc cctgacacag gacatcactg
                                                                    3420
eccaettett caggggeete etgaaegeet gtetgeggag cagagaeeee teeetgatgg
                                                                    3480
tcgacttcat actggccaag tgccagacga aatgcccctt aattttgacc tctgctctgg
                                                                    3540
tgtggtggcc gagcctggag cetgtgctgc tctgccggtg gaggagacac tgccagagcc
                                                                    3600
egetgeeeeg ggaactgeag aagetacaag aaggeeggea gtttgeeage gattteetet
                                                                    3660
3720
```

```
3780
ttgcgattca acaagtcagg gaagaaaaca tcaggaagca gctaaagaag ctggactgcg
agagagagga getattggtt tteettttet tetteteett gatgggeetg etgtegteae
                                                                  3840
atotgacete aaatageace acagacetge caaaggettt ceaegtttgt geageaatee
                                                                  3900
tegagtgttt agagaagagg aagatateet ggetggeact ettteagttg acagagagtg
                                                                  3960
acctcagget ggggcggete etectcegtg tggccccgga tcagcacace aggetgetge
                                                                   4020
etttegettt ttacagtett etetectaet tecatgaaga egeggeeate agggaagagg
                                                                  4080
cetteetgea tgttgetgtg gacatgtaet tgaagetggt ceagetette gtggetgggg
                                                                  4140
atacaagcac agtttcacct ccagctggca ggagcctgga gctcaagggt cagggcaacc
                                                                  4200
ccgtggaact gataacaaaa gctcgtcttt ttctgctgca gttaatacct cggtgcccga
                                                                  4260
aaaagagett eteacaegtg geagagetge tggetgateg tgggggaetge gaeecagagg
                                                                  4320
tgagcgccgc cctccagatg cagacagcag gctgcccctg acgctgtact gtcccaggag
                                                                   4380
ceteatetet tetgaeggga eetgeeactg caeaccagee eageteeegt gtaaataatt
                                                                  4440
atattcccag cataacatgg aagctctttg ttgcactaaa aagtggatta caaatctcct
                                                                   4500
cgactgcttt agtggggaaa ggaatcaatt atttatgaac tgtccggccc cgagtcactc
                                                                  4560
4620
accaageceg cetecageae caagggeggg cageaceete egaceeteee atgegggtge
                                                                  4680
acacgaaggg tgaggctgac acagccactg cggagtccag gctgctagag gtgctcatcc
                                                                  4740
teactgeegt ceteaggtgg gttegggett cacegeetgg ceetetgtgg teacaqaqqq
                                                                  4800
geteggtgge ceaggtggtg gtteegeete eaggggeagg geettgteet gggtetgtgt
                                                                  4860
cagcgggtgc accatggaca tgtgtacatt gaggttgtgg gccttctcaa accgccggcc
                                                                  4920
acactggtca caggcaaagt ccagctcagt ctcagccttg tgtttggtca tgtggtactt
                                                                  4980
gagggatgcc cgctgcctgc actggaaccc acagacctca cacctggggg acagaggcag
                                                                  5040
ataaaaaggt gcgagggcca cagccctggg gggggtcctg actcacactt actgcaaagg
                                                                  5100
cttggctccc gaatgtcgca tttggtggac gagaaggtgc ttccgctgct tqaaqqtttq
                                                                  5160
tccacattcg tcacagatat agttccgcac ctctgagagg ggagagtcca gtgagtccag
                                                                  5220
gcccctgatg ctccaacctc ccggggggac gacgatgaca atgtgaaacc atcacagctg
                                                                  5280
ggaagacatt tctgcacatg gttcaccatg cagtgggccc aagcaagggg cctatgaggg
                                                                  5340
cctcgtttat taagatcttt aaactgcttt atacactgtc acgtggcttc atcagctgtg
                                                                  5400
tgcatttcag gatggttttt aaagaaacct cagaaagcta tttccttaac cacaaaanan
                                                                  5460
aaaaaaaaa
                                                                  5470
```

```
<210> 6118
<211> 3773
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3431)...(1563)
<223> similar to gi972940 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6118
tagaaattgc catttggcct gctagaaagg aaaagtgaaa ggatgatatt ctgcaattct 60
gactaatgaa atttatttat aaacattaag taatgctgat gttctagtaa tattctctgc 120
acacttattc tttaagaaac ttttgcctga aaacagacac tgagaatttt tatatgattt 180
atttaataat aaaccaatta aagatacaaa aatgtttaga ggattccaaa atttaaattt 240
ttgtttaaat acaaattcac tctgtaatat gaaaacatag cattagacct ctaaacataa 300
tgatttttt catctacaaa aatttctgtt atactagaaa atttgcagaa gacatttttt cttgtgaca ttaaatgtac attattaca gttgaaaaag taatctaaaa acatttcatt 420
```

```
tcagaaagtt ggatatatat gttatctttg tatgcaaccc cccccaagtc cgcccccagt
                                                                      480
aaaaaatgat ccaaaatata aagcaattat gcttttataa ctgactactc agccagatta
                                                                      540
gcccaaggct caagttgctt tcttggccct taagaaagag tcttgactct ctcaaaatag
                                                                      600
                                                                      660
cagtattetg tttagcactt agcaacacaa gtttactaat ggaccgcaaa gcacagtggc
                                                                      720
ctaaagagtt agtaaacaaa ttatttagga agaatttatg gcagatctta cccataacag
                                                                      780
atgaataaat tttgttgggt cacttatttc tctgcaacat tttagctatt cttacattag
                                                                      840
gaaataacct gataatgatt taattgacat aacttgaaaa tataggtatt agaattaaaa
                                                                      900
aaattagaac tagaagagaa agtggtgatc atctagtcta atccaataca tctcttcctt
                                                                      960
ttatgagagg aactaaagcc caaagaggtc aagattacat agctagttag tgggagtgcc
                                                                     1020
attettagge tgatgetttt atactateet gettetgaaa cagggteage cataceacea
gcacctccaa tttttcatgt tattctacat attcatagtt ctatattata tagtgcagtc
                                                                     1080
                                                                     1140
aactaaagtc aatctaagtg acaccataat tttaacaaag cataaaatag gttttttgca
                                                                     1200
tttgaaagag tcaagactta acttacacaa gtggaatgaa aatagttcct atataaattt
cctgttgcct tctatttaag ttctgtattt acaaaagaat cagaaaatct aatacaatgt
                                                                     1260
aaaattagaa aagaaacttt aaaaatgctt atgatatagc aactgaaata aaaatctcaa
                                                                     1320
aagaatgtct tcatagtgta aaatgcctgt tccttcacga ttgaattctg aaacatttag
                                                                     1380
ataacaaaga gaaacagttg agttttcctc cctcatctaa caaagtcaaa attaactcta
                                                                     1440
tttttaacaa ttacaaaatt agaaacctcc ttagaattta tcttagaatc agtcagtctg
                                                                     1500
catataattg aaaatgttca attaacaaac aattattcat aagctttggt atattaacta
                                                                     1560
aaaagagttg ggttccagca gttcgttttg tttcatagct acctgagaag taaatccatt
                                                                     1620
ggaactggac actaccatca cataaggctg tggctgctgc tccgttttct cagtgttctc
                                                                     1680
tttcaaatga tcttcagatt cctttttctc tacttcctgt gtaagagttt ttgtttcttg
                                                                     1740
                                                                     1800
agttttgata actgaagtga ttacagtgcc aggtgggtga gcaaccagct gtgaacttcc
                                                                     1860
gaggagaaaa agggtcacca caggtgcagt agccactgaa ggatggagag gaagcccaca
ctgacggttc cattgcaaat ggtctgaaca ttgctagtaa ggacctgctg aaaccctggc
                                                                     1920
agggcccaag acaattgaag gaggagagcc cgccttttgt gactgcagca tgacattttc
                                                                     1980
tttcagtact gtcatgggct gtgatgatgg aatggcttgt aaaataaact tctgagatcc
                                                                     2040
agtacctgct gatggatctg tgctggctat aactgttgtg agtggcactg tttggagtgt
                                                                     2100
tactgtatgc aaactgctga ttcctaggag acacaaccac tggaacttgg gttggagcct
                                                                     2160
gtatagtccc taatactctg aacggaagaa tttaatgttt catcctgcat ggtactggtt
                                                                     2220
ctagctgctt ctccctctgg gacagcctgt actggctgta ctacatgaac agtccggaag
                                                                     2280
agctgggtag gatatggaga ctgcgtgggc tgcactgtcc tcaaaacttc tgatggttgt
                                                                     2340
gcaacttcca caggatcttt gggttttgca gctttagaat tccctggttt tagaactgta
                                                                     2400
gtggctcctc cttttacccc tggacttgaa gatactctcg accggctggt ttgattccta
                                                                     2460
tttgaagtgg ctgatgaaga tagcgatgga tctgaagact ctatgctgga acttggatcc
                                                                     2520
tcatcattta tatatataag atcttttggc atttctttaa actgatacac caagcgctga
                                                                     2580
cettecactt ttgccagaat acceetttgg taatagtace tgagtgetet teccatggge
                                                                     2640
tcataattca tatcagggtt tgtttttgtg cttccgccac aacctggaca ctggtttaga
                                                                     2700
atccaccaat ttaaaaatgc ctttctctcg ctgggtccac ttgatgtatt taggacaagt
                                                                     2760
agcettgtcc tggagcagtg ccagtaaaaa ctcccaaaga taaattgtgt ttccctttcc
                                                                     2820
atctttgttt ttcttcttca cagatatatt tggcgtagtg gctggggaat ctggtcgtgg
                                                                     2880
tggtttagtt tttcttcctt ttttcctctt aggctgttct ggtgatgagg ctcccggtga
                                                                     2940
gtctgcatat ttttcttgca cctgctgtgt ttccatcact tcaggaatcc catctaatgt
                                                                     3000
gacggacaca tgggtgactg gggcaacaac catgtcatct tcaggtgaac taaatatatt
                                                                     3060
attatttatt cgtttttcat ccagcatagg gccaggggaa tccatattga ggagtgcctc
                                                                     3120
agcagectea atagttteaa ttgttteate eeegteatga caagaagett caactgtaag
                                                                     3180
ggtgatgtca tcatcatcat cgtctatgat ttcttcttca gcaacatcca gtgaactctc
                                                                     3240
agtaatcatg tcattgggct cttccacaca ggctagaccg gcataactat tgagaatatc
                                                                     3300
agcaccagga acatgttcca caattacggc aggaaaaata gctggatcac caagctgtcg
                                                                     3360
ttcatcctcc atgacgttac tagcaaattc aaatactagg tcgttctgtt ggacaacagc
                                                                     3420
agccataata aagcattccc cttagatcca catgagaaaa attccaagaa gattcacgta
                                                                     3480
tcaggcagca aaatccagtg actgatttgg gtaaaaaacc ctcagctctg tctgtggagt
                                                                     3540
aattgtatac ccaagttttc tttagggaag gtgcttcagt tttcctggtt cattgatatt
                                                                     3600
ctagtcaaat tgagacaatt tttctgaaat ttttcttctc tcaagcttct tggccttcaa
                                                                     3660
gtattettte tetategtet tttgagettg aaaataaaaa gcaateegae aagttttage
                                                                     3720
tgttaaaatg gctcctgtag attggggaag tggtgtctgt gcttcagacg aaa
                                                                     3773
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (113)...(700)
     <223> similar to gi414347 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6119
cgacaagcaa gaagagcgac acgcccagca tgttggcgaa gatggcgagc tgcacgtccg
                                                                       60
tgatcatect gaccagteeg geteggetee egegteegeg tetaetgega gaatgaagae
                                                                      120
tattctcagc aatcagactg tcgacattcc agaaaatgtc gacattactc tgaagggacg
                                                                      180
cacagttatc gtgaagggcc ccagaggaac cctgcggagg gacttcaatc acatcaatgt
                                                                      240
agaactcagc cttcttggaa agaaaaaaaa gaggctccgg gttgacaaat ggtggggtaa
                                                                      300
cagaaaggaa ctggctaccg ttcggactat ttgtagtcat gtacagaaca tgatcaaggg
                                                                      360
tgttacactg ggcttccgtt acaagatgag gtctgtgtat gctcacttcc ccatcaacqt
                                                                      420
tgttatccag gagaatgggt ctcttgttga aatccgaaat ttcttgggtg aaaaatatat
                                                                      480
ccgcagggtt cggatgagac caggtgttgc ttgttcagta tctcaagccc agaaagatga
                                                                      540
attaatcctt gaaggaaatg acattgagct tgtttccaaa tttcaqcqqq ctttqattca
                                                                      600
gcaaagccac aacagttaaa aacaaagggt atcaggaaat tttttggatg ggtatcaatg
                                                                      660
tetetgaaaa aggaactgtt cagcaggetg atgaataagg tetaagagtt acctggetac
                                                                      720
agaaagaaga tgccagatga gagttaagac ctacttgtga tatttaaatg atgcaataaa
                                                                      780
agacctattg atttggacct tc
                                                                      802
     <210> 6120
     <211> 4241
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (351)...(1872)
     <223> similar to gi30215 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6120
tttcgtccag aaggaaggtg gggatgccgg gagcggggcg agcgggcggg ggttgtcagt
                                                                       60
ccgatctcgc gagagaggac ggaagcctgt gggagcccgt ggcctttaaa gtgccgttca
                                                                      120
geetttteet eeaggggtge tttgtaaaca eggetgtget eagggetege gggtgaeega
                                                                      180
aaggatcatg aactagtgac ctggaaaggg tactagatgg aaacttgaga aaggactgct
                                                                      240
```

<210> 6119 <211> 802 <212> DNA

```
300
tattgataac agctaaggta ttcctggaag cagagtaaat aaagctcatg gcccaccagc
tagaaagtat tettgeeatg agaaaaagaa tgtgataagt tatteaaett atgaaattea
                                                                      360
agttacatgt gaattetgee aggeaataca aggacetgtg gaatatgagt gatgacaaae
                                                                      420
cetttetatg tactgegeet ggatgtggee agegttttae caaegaggat catttggetg
                                                                      480
tccataaaca taaacatgag atgacactga aatttggtcc agcacgtaat gacagtgtca
                                                                      540
ttgtggctga tcagacccca acaccaacaa gattcttgaa aaactgtgaa gaagtgggtt
                                                                      600
tgtttaatga gttggcgagt ccatttgaga atgaattcaa gaaagcttca gaagatgaca
                                                                      660
ttaaaaaaat geetetagat ttateeeete ttgeaacaee tateataaga ageaaaattg
                                                                      720
aggageette tgttgtagaa acaacteace aggatagtee tttaceteae ecagagteta
                                                                      780
ctaccagtga tgagaaggaa gtaccattgg cacaaactgc acagcccaca tcagctattg
                                                                      840
ttcgtccagc atcattacag gttcccaatg tgctgcttac aagttctgac tcaagtgtaa
                                                                      900
ttattcagca ggcagtacct tcaccaacct caagtactgt aatcacccag gcaccatcct
                                                                      960
ctaacaggcc aattgtccct gtaccagggc ccatttcctc ttctgttaca tcttcctaat
                                                                     1020
gggacaaacc atgcctgttg gctattcctg gcatcaatta caagttctaa tgtgcatgtt
                                                                     1080
ccagetgeag teccaetegt tegaceagte accatggtge etagtgttee aggaateeea
                                                                     1140
ggtccttcct ctccccaacc agtacagtca gaagcaaaaa tgagattaaa agctgctttg
                                                                     1200
acceageaac atcetecagt taccaatggt gatactgtea aaggteatgg tageggattg
                                                                     1260
gttaggactc agtcagagga atctcgaccg cagtcattac aacagccagc cacatccact
                                                                     1320
acagaaactc cggcttctcc agctcacaca actccacaga cccaaagtac aagtggtcgt
                                                                     1380
cggagaagag cagctaacga agatcctgat gaaaaaagga gaaagttttt agagcgaaat
                                                                     1440
agagcagcag cttcaagatg ccgacaaaaa aggaaagtct gggttcagtc tttagagaag
                                                                     1500
aaagctgaag acttgagttc attaaatggt cagctgcaga gtgaagtcac cctgctgaga
                                                                     1560
aatgaagtgg cacagctgaa acagcttctt ctggctcata aagattgccc tgtaaccgcc
                                                                     1620
atgcagaaga aatctggcta tcatactgct gataaagatg atagttcaga agacatttca
                                                                     1680
gtgccgagta gtccacatac agaagctata cagcatagtt cggtcagcac atccaatgga
                                                                     1740
gtcagttcaa cctccaaggc agaagctgta gccacttcag tcctcaccca gatggcggac
                                                                     1800
cagagtacag agcctgctct ttcacagatc gttatggctc cttcctccca gtcacagccc
                                                                     1860
tcaggaagtt gattaaaaac ctgcaggaca acagttttag atactcatta gtgacttcaa
                                                                     1920
agggaaatca aggaaagacc agtttccatt tatgcgaaat ctgtggttgt aaattttttt
                                                                     1980
ttttacttga aattaaattt ggctctaaag ttggtgtagc agcagttgat cagactgaaa
                                                                     2040
aacggttttt agtctctgga aaaagactga ttttgctttt tttataaata ttattagatt
                                                                     2100
tattaatttt tetgtgetea atgtgtaaat tgtattataa tteattgtga tttattteae
                                                                     2160
ttttaatttg ctggtgtttt aataaatggg gggtgttact tgaatctttc ttcccacttc
                                                                     2220
catttctttt gaccacccct taaccctcaa ctgtgacggt agtaggtatt atccatttat
                                                                     2280
accaaagttt tgcatagtcc ctgttgactt tgtaatgtta acggagtcat aaaagcacta
                                                                     2340
ggcaagagaa agatagaaat ttgcttttaa tctttttgcc ttttattttg cacattatgc
                                                                     2400
aaaagggaaa acattaaagg acactttttt ttaagtgagt aaaacatggt aaagacatac
                                                                     2460
agtgctttta tgcacattgt taagctaaat caaggtcatt tataatcatt ttccttttt
                                                                     2520
atttaagatt ttaagtaaac aaattttaga attttcagca tttcaaaaat gattttattt
                                                                     2580
ttcaagtctt aaattcaata ttttacacct atgttttgag gctaaaaata tgaaattata
                                                                     2640
taatgtatga tacagggtta tcaaatatct aataattttt gaaattagct cttgtttttg
                                                                     2700
gtttttttgt tgttgttttt acagatttca ggttacaaac tgcaaagttt atgcataatt
                                                                     2760
aagtatggta tggttgccag aaaagcctaa aattactact tagaaaattt aagactgttt
                                                                     2820
acccccattg tettgtactt gegagetaac ttgtactatt ettgtgaaag cactgtcate
                                                                     2880
ttttagtagc aaattttgat aatgtttctc gtggaaaaaa aaatcagtat ctatctttag
                                                                     2940
aacaatgtaa ttataatgtg ggaagtgtgc atgaatgaga gagagtgtgt gtgtatctgt
                                                                     3000
gtgtgtgtgc gcgtgtgtgt gtgtctttta atagtttatg ccagcaatct ttgcttgaat
                                                                     3060
gtttaacgat gccttcagtg tgatgctggc caatagatga ttgcagttta aaatgtcatt
                                                                     3120
attgtgcagg cttggataac taacattcca tgatgtagct tgtttctgat gagatgattg
                                                                     3180
taggtacatt tttctcatta tccaatcatc tgtgggatac ttagttttct aatgtgccat
                                                                     3240
tatctatttt tattctgcag ttatgttcaa aatacagtac atattttaaa atagaataaa
                                                                     3300
ttgttaaaca taaaatttta aaagtagtag atgtgcgtaa gaaaactttg taaaatagtt
                                                                     3360
atgagteeta eecagtagea aettetggea tteaageagg atteeaetat gtaaatatet
                                                                     3420
gtaatgcatt tataataagt tgtgtagttt gtcctgcatc catactacac tatttgctaa
                                                                     3480
agtctcagtg ccatctccta atgagactga cattttaaaa gtctgtatgg aatatccttg
                                                                     3540
ataattcaag gaaatatccc tcctgcctaa gttccaaact gggaaacatt caaattatat
                                                                     3600
aaatgacatt tcaggacttt aagtatgaag ataatgggaa ttttattgtt ttgcttttta
                                                                     3660
```

```
aaatgagaqc attittatti gataattitt titaaattit taattittaa ctaatticat
                                                                     3720
tattttaaag taatcagttt ttcaaatcat gattttgata tcattattct aaggagttat
                                                                     3780
ctcaaaggca caaaatatga attctgcaag aaggctattt tttattgtag tttgaatggg
                                                                     3840
ttaggaaaag cctcaatttt tcactcttaa gtccttcagt acatttttct ttcatcttat
                                                                     3900
tacttatgca agttaaggtt ctttggtaac agaattcttg caactgtaaa ataaaactac
                                                                     3960
                                                                     4020
atagatgtaa gaagtcatgt aaacggttaa caagcttacc aaggttagca aaactttcat
                                                                     4080
tgtaaatcag tctgtactga gcaaataaaa atcattatta gttgtataaa cacaaattcc
attttgactt tcaggatgtc atactacttc tgtacctagc attttcagtc cttatatttg
                                                                     4140
caatqttaca caaactqtac tattttcttt tatqtqcaqt ttqcatqaqt aaaccatcag
                                                                     4200
agaataaatt ctatctttaa attatgttca taaaaaaaaa a
                                                                     4241
```

```
<210> 6121
<211> 3845
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (228)...(3148)
<223> similar to gi2125814 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6121 60 cggacggcaa gcggcgggag attttcaaaa tgggagccca gaggcaccgc ccaggcctcg gaaggtgtca gggagaactt tccgtggttt cagcgtcgtc gcctggagcg gcggtttaga 120 gageegagee tgatgggege caaggeegge tggetgettg gagegetgee tegaagggae 180 tgcgtgaagg aagctaatcc ggagaaccca ggccagagcc tggaaatatg gcgacctgca 240 teggggagaa gategaggat tttaaagttg gaaatetget tggtaaagga teatttgetg 300 gtgtctacag agctgagtcc attcacactg gtttggaagt tgcaatcaaa atgatagata 360 agaaagccat gtacaaagca ggaatggtac agagagtcca aaatgaggtg aaaatacatt 420 gccaattgaa acatccttct atcttggagc tttataacta ttttgaagat agcaattatg 480 tgtatctggt attagaaatg tgccataatg gagaaatgaa caggtatcta aagaatagag 540 tgaaaccctt ctcagaaaat gaagctcgac acttcatgca ccagatcatc acagggatgt 600 tgtatcttca ttctcatggt atactacacc gggacctcac actttctaac ctcctactga 660 ctcgtaatat gaacatcaag attgctgatt ttgggctggc aactcaactg aaaatgccac 720 atgaaaagca ctatacatta tgtggaactc ctaactacat ttcaccagaa attgccactc 780 gaagtgcaca tggccttgaa tctgatgttt ggtccctggg ctgtatgttt tatacattac 840 ttatcgggag accacccttc gacactgaca cagtcaagaa cacattaaat aaagtagtat 900 tggcagatta tgaaatgcca acttttttgt caatagaggc caaggacctt attcaccagt 960 tacttcgtag aaatccagca gatcgtttaa gtctgtcttc agtattggac catcctttta 1020 tgtcccgaaa ttcttcaaca aaaagtaaag atttaggaac tgtggaagac tcaattgata 1080 gtgggcatgc cacaatttct actgcaatta cagcttcttc cagtaccagt ataagtggta 1140 gtttatttga caaaagaaga cttttgattg gtcagccact cccaaataaa atgactgtat 1200 ttccaaagaa taaaagttca actgattttt cttcttcagg agatggaaac agtttttata 1260 ctcagtgggg aaatcaagaa accagtaata gtggaagggg aagagtaatt caagatgcag 1320 aagaaaggcc acattetega tacettegta gagettatte etetgataga tetggeaett 1380 ctaatagtca gtctcaagca aaaacatata caatggaacg atgtcactca qcaqaaatgc 1440 tttcagtgtc caaaagatca ggaggaggtg aaaatgaaga gaggtactca cccacagaca 1500 acaatgccaa cattittaac tictitaaag aaaagacatc cagtagtict ggatcttitg 1560 aaagacctga taacaatcaa gcactctcca atcatctttg tccaggaaaa actccttttc 1620

```
catttgcaga cccgacacct cagactgaaa ccgtacaaca gtggtttggg aatctgcaaa
                                                                     1680
taaatgctca tttaagaaaa actactgaat atgacagcat cagcccaaac cgggacttcc
                                                                     1740
agggccatcc agatttgcag aaggacacat caaaaaatgc ctggactgat acaaaagtca
                                                                     1800
aaaagaactc tgatgcttct gataatgcac attctgtaaa acagcaaaat accatgaaat
                                                                     1860
atatgactgc acttcacagt aaacctgaga taatccaaca agaatgtgtt tttggctcag
                                                                     1920
atcetettte tgaacagage aagactaggg gtatggagee accatggggt tatcagaate
                                                                     1980
gtacattaag aagcattaca totoogttgg ttgotoacag gttaaaacca atcagacaga
                                                                     2040
aaaccaaaaa ggctgtggtg agcatacttg attcagagga ggtgtgtgtg gagcttgtaa
                                                                     2100
aggagtatgc atctcaagaa tatgtgaaag aagttcttca gatatctagt gatggaaata
                                                                     2160
cgatcactat ttattatcca aatggtgggt agaggttttc ctcttgctgg ataqaccacc
                                                                     2220
ctcacctact tgacaacatc agtagggtac agcttttgac aatttaccag aaaaatactg
                                                                     2280
gcgaaaatat caatatgctt ccaggtttgt acagcttgta agatctaaat ctcccaaaat
                                                                     2340
cacttatttt acaagatatg ctaaatgcat tttgatggag aattctcctg gtgctgattt
                                                                     2400
tgaggtttgg ttttatgatg gggtaaaaat acacaaaaca gaagatttca ttcaggtgat
                                                                     2460
tgaaaagaca gggaagtett acaetttaaa aagtgaaagt gaagttaata gettgaaaga
                                                                     2520
ggagataaaa atgtatatgg accatgctaa tgagggtcat cgtatttgtt tagcactgga
                                                                     2580
atccataatt tcagaagagg aaaggaaaac taggagtgct ccctttttcc caataatcat
                                                                     2640
aggaagaaaa cctggtagta ctagttcacc taaggcctta tcacctcctc cttctgtgga
                                                                     2700
ttcaaattac ccaacgagag atagagcatc tttcaacaga atggtcatgc atagtgctgc
                                                                     2760
ttctccaaca caggcaccaa tccttaatcc ctctatggtt acaaatgaag gacttggtct
                                                                     2820
tacaactaca gcttctggaa cagacatctc ttctaatagt ctaaaagatt gtcttcctaa
                                                                     2880
atcagcacaa cttttgaaat ctgtttttgt gaaaaatgtt ggttgggcta cacaagttaa
                                                                     2940
ctagtggagc tgtgtgggtt cagtttaatg atgggtccca gttggttgtg caggcaggag
                                                                     3000
tgtcttctat cagttatacc tcaccaaatq qtcaaaacaa ctaqqqtatq qaqaaaatqa
                                                                     3060
aaaattacca gactacatca aacagaaatt acagtgtctg tcttccatcc ttttgatgtt
                                                                     3120
ttctaatccg actcctaatt ttcattgatt aaaactcctt tcagacatat aagtttaata
                                                                     3180
aataactttt ttgttgactt tcaagtaaag tgattttttt taattttaac ataaagtctt
                                                                     3240
cagaaagcct ttctatggaa aggaatttta acctataatg taaaqqqatq tattctqaqq
                                                                     3300
ggaacaaggc aggaatggaa acttgaggtc acttactaaa tatagtggat ataaaataga
                                                                     3360
acaccegace ttgcccccta gacccataac cccccgaace ttacctatgt tcatatattt
                                                                     3420
gtattgaaca attcttttaa aagcaaaaat gtaaatgatg tgtagtttat ttgtgctttt
                                                                     3480
attgttttcc ctgcgtctca gacatgttga gaatcatgga caaaacctgc tggaattttg
                                                                     3540
gaatttttga agatgtaaat aatgtgtatt tatgttataa gtaacatatg taaacatgta
                                                                     3600
tatttgtttt atatttattt ttgtaacacc agtgtctgat gaaacatttt tqcaaatqca
                                                                     3660
ttttataaaa aaataaatat agtgataagt tacattatct tttgattcat ttaattaaat
                                                                     3720
acttattttt aaataactta ccagtaaact cactttttaa attttgttgc ctgttgagga
                                                                     3780
gccaattaaa ttttaaatat taattttgca aatgttaaat acattgtttc tctattatct
                                                                     3840
gaaaa
                                                                     3845
```

```
<210> 6122
<211> 2846
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2748)...(1342)
<223> similar to gi4680665 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>			L L _ L L L L L L L L L L L L L			60
			tgacctgttt			60
			ttgtcttctg	_		120
			cttaggaaga			180
			ttaacttaac			240
			ccaaagatga			300
			taagcctatt			360
			acaaatgcct			420
			aaccttcatt			480
			taacattcag			540
			cctttcacaa			600
			ggggcagata			660
			actaagttca			720
			ctatttcagg			780
gaaaagaaca	gataacctct	tggttatttt	aatggggcag	gatcagaaga	ggaggtgtgg	840
			taataaatac			900
gaacgtaagg	caaaagtgtt	acagtctctg	attttaatga	gtcaatctca	aggcaaagct	960
ataacctttt	ccatgtgaac	cttaaaacgg	aaatcctacg	tgtttggctc	agctaccata	1020
gacatgtctt	gccccagagt	tccagtgtat	ttttcacctt	tagtttcttg	gctcctctcc	1080
gcctctacac	cagcctcata	tccacacggg	atgctctctg	ctgagtattg	tcttgagtta	1140
gttctccctc	tcatgttctg	gctgatgcta	ctcatggtca	tagtatcacc	tgagggggaa	1200
ggagtatgct	atgaaggtga	aaaatgctac	catagcattt	tgtttgttta	taaaatgtca	1260
ggccctggtt	ccatttttcc	cccctcttat	atctaaattt	tgaaaccact	ggcctctaac	1320
agtctgtagt	aggcttaagt	tcaaggtgcc	atttgcttct	ctggtgcctg	tttgtgagcc	1380
aaatagagga	agagtatgct	agagagagcg	ctgaccagga	agatcacatc	aaaccaacgg	1440
tgatagaagt	tgaactgcag	ttctccaagg	acttcagtga	ttatggtgcg	gtattctaaa	1500
			gagacaaagt			1560
			gctaatagca			1620
			gtaagagtga			1680
			gaaatgtgtt			1740
			tcaatgcctc			1800
			gccatgaaaa			1860
			ttccccttga			1920
			tccagaaaaa			1980
			agattttcac			2040
			ggtttgttat			2100
			tttttgctta			2160
			gtgtcagtca			2220
			aatccagaaa			2280
ccaatcacac	caacccggct	gatgagetgt	tctatggata	agateceatg	ttttgggctg	2340
			aagaaataca			2400
			tagtcggata			2460
			aggatcagca			2520
			aatactccta			2580
			acggagaaga			2640
			atgaagaaaa			2700
			tcgatgagga			2760
			gaggccacag			2820
	ccttctccca			cacgetegae	aggeoceece	2846
		33-3-6				4040

<210> 6123

<211> 1875

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1876)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (147)...(1248)
<223> similar to gi704441 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6123 eggeegeege eccepeetqq qeeqeqetee eccteteecq eteceteect ecctgeteea 60 actectecte ettetecatg cetetgttee teetgetett acttgteetg eteetgetge 120 tcgaggacgc tggagcccag caaggtgatg gatgtggaca cactgtacta ggccctgaga 180 gtggaaccet tacatecata aactacccac agacctatec caacagcact gtttgtgaat 240 gggagatccg tgtaaagatg ggagagagat ttcgcatcaa atttggtgac tttgacattg 300 aagattetga ttettgteac tttaattaet tgagaattta taatggaatt ggagteagea 360 gaactgaaat aggcaaatac tgtggtctgg ggttqcaaat qaaccattca attqaatcaa 420 aaggcaatga aatcacattg ctgttcatga gtggaatcca tgtttctgga cgcggatttt 480 tggcctcata ctctgttata gataaacaag tttttctaga tctaattact tgtttggaca 540 ctgcatccaa ttttttggaa cctgagttca gtaagtactg ccccaqctgg ttgtctgctt 600 ccttttgctg agatatctgg aacaattccc acatgggata tagagattcc tcgccattgt 660 gccatggcct ggtgtgccat gccaggagta gtgtccaaac acgttgggcg qcccaaatca 720 gtgttgtaat tagtaaaggt attccctatt atgaaagttc tttggctaac aacgtcacat 780 ctgtggtggg acacttatct acaagtcttt ttacatttaa qacaaqtqqa tqttatqqaa 840 cactggggat ggagtctggt gtgatcgcgg atcctcaaat aacagcatca tctgtgctgg 900 agtggactga ccacacaggg caagagaaca gttggaaacc caaaaaagcc aggctgaaaa 960 aacctggacc gccttgggct gcttttgcca ctgatgaata ccagtggtta caaatagatt 1020 tgaataagga aaagaaaata acaggcatta taaccactgg atccaccatg gtggagcaca 1080 attactatgt gtctgcctac agaatcctgt acagtgatga tgggcagaaa tggactgtgt 1140 acagagagcc tggtgtggag caagataaga tatttcaagg aaacaaagat tatcaccagg 1200 atgtgcgtaa taactttttg ccaccaatta ttgcacgttt tattagagtg aatcctaccc 1260 aatggcagca gaaaattgcc atgaaaatgg agctgctcgg atgtcagttt attcctaaaq 1320 gtcgtccctc ccaaaacctt accaacctcc acctcctcgg aacagcaatg acctcaaaaa 1380 cactacagcc cctccaaaaa atttagccaa aggtcgtgcc ccaaaattta cgcaacgcac 1440 tacaacctcg cagtagcaat gaatttcctg cacagacaga acaaacaact gccagtcctg 1500 atatcagaaa tactaccgta actccaaatg taaccaaaga tgtagcgctg gctgcagttc 1560 ttgtccctgt gctggtcatg gtcctcacta ctctcattct catattagtg tgtgcttggc 1620 1680 caagttggtg gaaaggaatg aagcagtttc ttcctgcaaa agcagtgtac catgaggaaa 1740 ccccagttcg ctatagcagc agcgaagtta atcacctgag tccaatataa gtcaccacag 1800 tgctgcaggc tgactctgca gagtatgctc aaccactggt aggaggaatt gttggtacac 1860 ttcatcanag attac 1875

<210> 6124 <211> 1734

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (160)...(1624)
<223> similar to gi5916108 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6124
ggcacgaggg gccgcagctc ctccggctct gcagggtcac ggaggaagcc agctccccta
                                                                       60
gtccaggccg agcttgcact tgcgtcttgt ctgctgctgc tgaaccaaga tttagctgtg
                                                                      120
cgccctcctt gcagtctcct ggaaccagca ggaggaaaca tgggggatac tggcctgaga
                                                                      180
aagcggagag aggatgagaa gtcgatccag agccaagagc ctaagaccac cagtctccaa
                                                                      240
aaggagetgg geeteateag tggeatetee ateategtgg geaceateat tqqetetqqq
                                                                      300
atcttegttt cececaagte tgtgeteage aacaeggaag etgtggggee etgeeteate
                                                                     360
atatgggcgg cttgcggggt cctcgcgacg ctgggtgccc tgtgctttgc ggagcttggc
                                                                      420
acaatgatca ccaagtcagg gggagagtat ccctacctga tggaggccta cgggcccatc
                                                                      480
cccgcctacc tetteteetg ggccageetg ategteatta ageccaegte ettegecate
                                                                      540
atotgoctca gottotccga gtatgtgtgt gegecettet atgtgggetg caagectect
                                                                     600
caaatcgttg tgaaatgcct ggccgccgcc gccatcttgt tcatctcqac aqtqaactca
                                                                     660
ctgagcgtgc ggctgggaag ctacgtccag aacatettca ccgcggccaa gctggtgatc
                                                                     720
gtggccatca tcatcatcag cgggctggtg ctcctggccc aaggaaacac aaagaatttt
                                                                     780
gataattett tegagggege eeagetgtet gtgggageea teageetgge gttttacaat
                                                                     840
ggactetggg cetatgatgg atggaatcaa etcaattaca teacagaaga aettagaaac
                                                                     900
ccttacagaa acctgccttt ggccattatc atcgggatcc ccctggtgac ggcgtgctac
                                                                     960
atcctcatga acgtgtccta cttcaccgtg atgactgcca ccgaactcct qcaqtcccaq
                                                                    1020
geggtggetg tgacatttgg tgacegtgtt etetateetg ettettggat egtteeaett
                                                                    1080
tttgtggcat tttcaaccat cggtgctgct aacgggacct gcttcacagc gggcagactc
                                                                    1140
atttacgtgg cgggccggga gggtcacatg ctcaaagtgc tttcttacat cagccgtcag
                                                                    1200
gegeeteact ecageeceg ecateatett ttatggtate atagcaacga tttatateat
                                                                    1260
ccctggtgac ataaactcgt tagtcaatta tttcagcttt gctgcatggc tgttttatgg
                                                                    1320
cctgacgatt ctaggactca tcgtgatgag atttacaagg aaagagctgg aaaggcctat
                                                                    1380
caaggtgccc gtagtcattc ccgtcttgat gacactcatc tctgtgtttt tggttctggc
                                                                    1440
tecaateate ageaageeea cetggggagt acctetactg tgtgetgttt atattaagge
                                                                    1500
ggccttttat tttacttcct gtttgtccac tacaagtttg gatgggctca gaaaatctca
                                                                    1560
aagccgatta ccatgcacct tcagatgcta atggaagtgg tcccaccgga ggaagaccct
                                                                    1620
gagtaacaag ctccgtctct tgtagccaag tcagctgaat ttattttctt aagcaatatt
                                                                    1680
tgtggttatt tcttcctttt tttcctacga ataaaatata ctcagatgtt taaa
                                                                    1734
```

```
<210> 6125
<211> 4344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)...(2448)
<223> similar to gi3882273 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6125

tttcgtgcct gtcggctgac gtgtctgcag ttcctccgcg tctactgcga gtcaggccgt 60 gatggcggac gcctgggaag agattaggcg gttggcggcc gacttccagc gggcgcagtt 120 egeegaggee acgeagaggt tgteegageg gaactgeatt gagattgtta ataaattgat 180 tgctcagaaa cagctagaag tagttcatac actcgatgga aaggaatata ttactccagc 240 ccaaattagt aaagaaatga gagatgagct acatgtccga ggtggtcgag taaacattgt 300 tgatctacaa caggtaatta atgtggacct gattcatatt gaaaatagaa ttggtgacat 360 tattaaatca gaaaagcatg ttcagttagt gttgggacaa ctgatagatg agaattattt 420 ggatcggttg gcagaagagg tcaatgataa attgcaagaa agtggtcagg tcaccatatc 480 agaactgtgt aaaacttatg atcttcctgg gaactttctg acacaggcac taactcagcg 540 acttggtaga attatcagtg gacatattga tcttgataat agaggagtaa tttttacgga 600 agcttttgta gctcgacata aagcacgtat ccgtggacta ttcagtgcta ttacccggcc 660 tacagetgtg aattetttga tttcaaaata tggatttcag gagcagette tttactetgt 720 gcttgaggaa cttgttaata gcggacgctt acgaggcact gtggttggtg ggagacagga 780 taaagctgtg tttgtccctg acatctactc caggacacag agtacttggg tggattcctt 840 tttcaggcag aatggctatc tagaatttga tgctttgtcc agacttggaa tcccagatgc 900 tgtaagctac ataaagaaaa gatataagac tacacaactc ttgtttttga aagcagcttg 960 tgttggtcaa ggacttgtgg atcaagtgga agcatcagta gaagaagcca tcagctctgg 1020 aacatgggtt gatattgcac ctctgctacc cacttcttta tcagttgaag atgctgccat 1080 attgcttcag caggtgatga gggcattcag caaacaggcc tcaactgtag tctttagcga 1140 cactgttgta gtcagtgaaa aattttataa atgactgtac agaactgttc cgtgagctga 1200 tgcaccagaa agctgaaaag gaaatgaaaa ataatcctgt gcatttaatc actgaagaag 1260 atctgaaaca aatctccact ttagaaagcg ttagtacaag taaaaaggat aaaaaagatg 1320 agcgaagaag gaaagcaaca gagggcagtg gaagcatgag aggaggaggt gggggcaatg 1380 ccagagagta caaaattaaa aaagtcaaga agaaaggaag aaaagatgat gatagtgatg 1440 atgaatctca atcatcccac actggaaaga agaagccaga gatcagtttt atgttccagg 1500 atgagattga agatttttta agaaaacaca tacaagatgc ccctgaggag tttatttcgg 1560 aacttgctga gtacttaata aaacctctta ataaaactta tctcgaggtg gtacgttcag 1620 tattcatgtc ttcaacaact tctgcttctg ggacgggcag aaaacgcaca atcaaggact 1680 tgcaagaaga agtttcaaac ctgtacaata acattaggtt atttgaaaaa gggatgaagt 1740 tttttgcaga tgacacacag gctgctctta ccaaacactt gctgaagtca gtgtgtactg 1800 atatcactaa cctcattttc aacttcttag cttcggattt aatgatggca gtagacgatc 1860 ctgcagccat tacaagtgaa ataagaaaga aaattttaag taaattatca gaagaaacca 1920 aagtagetet tacaaaacte cataactete tgaatgaaaa gagcatagaa gattttattt 1980 cttgtctgga ttctgcagca gaagcttgtg atattatggt gaaaagggga gacaaaaaa 2040 gggaaagaca gatactgttc caacatcgac aagcactggc tgaacagcta aaggtcacag 2100 aagaccctgc tettattetg caceteacat cagteetgtt gttteagttt teaacceaca 2160 gcatgctcca tgcacctgga agatgtgtcc cacagatcat tgcttttctt aatagtaaaa 2220 ttccagagga tcagcatgct cttttggtaa agtatcaagg tttggttgta aagcagctag 2280 tcagtcaaag taagaagact gggcagggag attatccctt gaataatgaa ttagacaaag 2340 aacaagaaga tgttgccagt actactcgta aagagcttca agaactttct tcatccatta 2400 aagacettgt teteaaatet aggaaateat etgtgaegga agagtaatga tettaattta 2460 catttgtcat atagtaagca ttttccccca aggttgaagg tgagtggtca caaaaaagta 2520 gtcactatac aactcccctc tccctgcaaa aaccacctca tacacacaca attcagttaa 2580 aacagtagta ttgtattaaa tgtaaatctt aaaaagatgt gaatttttgt aaattgggtt 2640 cttcatggaa gttttttcc acctgatttt cacacaaata ctatatgaaa tttttcacat 2700 tattttcaca taattttaaa aattacatat ttcaggtttg ttctctttcc aaatgttgaa 2760 tgaaaaacaa attttccaat ccatttatcc ctggggaagg attcatttgt tgcgagtgcc 2820 agtatactta aatgtatact ttatatacat ttaagcagaa atttaaaatg tggtcttttt 2880 tttttaaaag aaacacttct gtgtcagaaa tgaaaataaa tcatgttttt tattttaaa 2940 tagaaagcac ttcaaaacta aaatacagaa atttacaaaa aagaaaaatt attactaagc 3000 ccttgctctt atttttggca gaataaacat tgattttggt tggggctgca aggatgcctt 3060 tacaggtgca caagaacgct agagtggccc atgcattgct gtgttctctt ctaaaacaag 3120 ctactaacaa gagagagaac acatgcaatt tattaccagt aagcataagt catatttaac 3180

```
attggaataa ctaagcattt tatacaaaga tttttctttg acccagtttg catttgtaca
                                                                    3240
ttttattttt ttagttcaac agctgctctg tcacataata ctttgtaaat actagtgtga
                                                                    3300
aaaacagata ggatgccttt tccagtggta ggagcatctg taagtgcatt taaatcatta
                                                                    3360
gaagcttttt tcccaaaacc tagaaaccct tattaaaaaa tagacatttt tttctaaaga
                                                                    3420
ttattagtta aaaataacta aaagagttcc ttagagtaat catttcaacc aaatgaattt
                                                                    3480
caagcaacaa cttacttact atttatcaaa aagggattta attattttqa atataattat
                                                                    3540
aaattaaatt tcaaatattt aaaaatacta ttttatataa ttccttatga cattttaaac
                                                                    3600
tttatatttt aaaatatttg aatacgaaaa gatcagtcta cctctactcc attctagaca
                                                                    3660
aagtattaat ccttagtgaa agtaattaat taaattgcca acttggcatt attattaaac
                                                                    3720
ttgataggaa cgcaacatta aatttaaaaa tgttttcccg tgggtaattt tctattatat
                                                                    3780
attttcatat gggcaaaggg aaaaaatgat aaatcctctg taatcacaaa ccccaatttc
                                                                    3840
gttttgttta ttcagcttct aaaatattga acacccagac ttttaattca acctttaaga
                                                                    3900
accttatcat ttatgtttca gtagatatca aagtaatcca tgtttgtgtc aaatgatcat
                                                                    3960
agaaaataaa tagaagagac agtgaagcaa gtaaaaagaa aagcattgtt ttaatttgtt
                                                                    4020
tgcattaatt tttttcattt gtcaaaatgc ttcttttgtt gccacgagta aagaacagtt
                                                                    4080
tttattgttt tgtaagtaaa attacgtagc tgattttgta tgtaaagatt aatttccata
                                                                    4140
ataaaaatta ttgtatgttt actgtgatct taatgggcag ggttaagaaa gttatttaaa
                                                                    4200
ataaagttac ctattctact aaattttata gtactttgaa gcttctatta attaacacaa
                                                                    4260
agattaattg gtgcatatat tttatatata tacattttga attctcattt tgaacattat
                                                                    4320
taaaggattt tatttttctt acac
                                                                    4344
```

```
<210> 6126
<211> 2209
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2210)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (80)...(1131)
<223> similar to gi5102636 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6126
gagaaggag aagcaggatc ccctggtgct ccggggcagg aatggaaaca cggggaagaa
                                                                       60
nccctggaat ccccaggatt tccctggaaa ccgaggatta atgggcccaa aagggagaaa
                                                                      120
ttgggcctcc caggacagca aggaaaaaaa ggagccccag ggatgccctg gtttaatggg
                                                                      180
aagcaatggc tcaccaggcc agcctggaac accgggatct aagggaagca aaggtgaacc
                                                                      240
tggaattcaa gggatgcctg gggcttctgg gctcaaggga gaaccaggag caacgggttc
                                                                      300
cccaggagaa ccaggataca tgggtttacc cgggattcaa ggaaaaaagg gggacaaagg
                                                                      360
aaatcaaggt gaaaaaggta ttcagggtca aaagggagaa aatggaagac agggaattcc
                                                                      420
agggcaacag ggaattcaag gccatcatgg tgcaaaagga gagagaggtg aaaagggaga
                                                                      480
acctggtgtc cgaggtgcca ttggatcaaa aggagaatct ggggtggatg gcttgatggg
                                                                      540
gcccgcaggt cctaaggggc aacctgggga tccaggtcct cagggacccc caggtttgga
                                                                      600
tgggaagccc ggaagagagt tttcagaaca atttattcga caagtttgca cagatgtaat
                                                                      660
aagagcccag ctaccagtct tacttcagag tggaagaatt agaaattgtg atcattgcct
                                                                      720
```

```
780
gtcccaacat ggctccccgg gtattcctgg gccacctggt ccgataggcc cagagggtcc
                                                                      840
cagaggatta cctggtttgc caggaagaga tggtgttcct ggattagtgg gtgtccctgg
                                                                      900
acqtccaggt gtcagaggat taaaaggcct accaggaaga aatggggaaa aagggagcca
                                                                      960
agggtttggg tatcctggag aacaaggtcc tcctggtccc ccaggtccag agggccctcc
tggaataagc aaagaaggtc ctccaggaga cccaggtctc cctggcaaag atggagacca
                                                                     1020
                                                                     1080
tggaaaacct ggaatccaag ggcaaccagg cccccaggc atctgcgacc catcactatg
                                                                     1140
ttttagtgta attgccagaa gagatccgtt cagaaaagga ccaaactatt agtgtctgat
gcctcattca gcagcctagg catggtgctt tttctgtggt cttttgcatc tcaggaagat
                                                                     1200
                                                                     1260
aaccaacagt aatcccttga aaagaaactt aagtacctcg gcgtttttat ttttttttc
                                                                     1320
ttatggaaaa aaatataaaa gatcacatat actgatttta aaggctcctc agtcatttgg
agcccttgga ttagcagcat taattaaatc tcaagggttt cttgtaaagt ccatttatgt
                                                                     1380
                                                                     1440
taatcaaagt tgaatataaa aatccaccat tgcctgttag ccagtcagtt ttagtcactg
                                                                     1500
tgaaatattt cacattcagc ctccatgcag tagagatttg agtttaattt catgtccatg
                                                                     1560
tgactttcat gtttcctatc tcatagctca tgctactaca taagccaaaa catgtatctc
                                                                     1620
atcattggaa gtaagatcag ggctgatatt cacctgggat agacagtatt ggtgaactac
                                                                     1680
tcatttacta cagtgtctca gccttgataa agggcagtgg attgcctgtt gttcggtgtt
                                                                     1740
gtgaatagca cctctgaata agattagagt gtttcttaat tcatttcaaa ctctaaaatt
agattaatgg tggtgctaag aaagagtatt aattactttg ggaatggtca aaattaacat
                                                                     1800
taaaaacatt ttagacaaaa agtttcattg tacattcaaa gaaaatgtaa gtttggaagt
                                                                     1860
actaaaagac tattttatac ttgttgatta atcggaatgt ttgttgtatg ccttcatttt
                                                                     1920
ccatttcact tatatgtgta tgtccatata tgttaatttt cattgtagca aagctaatgg
                                                                     1980
aaataaagct aatgctctag ttgaaagaaa aggaaaactc cctgaaatcc tagaatgtct
                                                                     2040
tgttattttt agctgactgt aaaatattat gaacagtctt tgtgtattgt gcttaatgct
                                                                     2100
tttgtaagaa acagaatttg aaatatttca tccttgtcat gctcaaaatt ttgttacatg
                                                                     2160
cttgttattc agagtataat aaagttttgt acaggcctga aaaaaaaaa
                                                                     2209
```

```
<210> 6127
<211> 2002
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (558)...(1439)
<223> similar to gi1707567 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6127
tttttttttt ttttttgct agtttatatg aaagaccatt tttaatatga aaagagaaaa
                                                                       60
acaatttgaa ggccccacaa tttgttgtgt aacaacataa tttcaagtaa agtgaatgtg
                                                                      120
attaaaacat cttgatttca caaagccatt cagaggaggc ttcgacaaac gcaaagcgta
                                                                      180
cccaaacct ggagggtcac atcccggctg ctacaaacct cggcggggcg gcccccgtct
                                                                      240
tgcggctcgg gacagcgcag actatgcagg ggccgcaggg gaccacgcag attggcacgc
                                                                      300
                                                                      360
cegtteecca teccegeage gegtetgeae eggagactet geggggattg tageeggagg
                                                                      420
gegggeeggg etcegaggeg etgeteagge attggggttt gteeteatga getecaegte
ggcgtgcacc atctccctca ccagctcatc gaaagcgacc cggggcttcc agttcagctt
                                                                      480
ctgtttcgct ttggtgcagt cgccctgcag aaagtcctcg gcggcagcgt gcgaccctct
                                                                      540
                                                                      600
ttctaacgcg gccgtggatg tttcttcccg ggccgcagcc aagcgcggtt cttcctgggc
ggtggctttg ggcttttcgt acccacagtc aagtcagttc acgtcgcctc ccgcacacac
                                                                      660
gcgttcataa aacgaaactg gagtttcacg aagcaattct taggcttagc gtccaggaac
                                                                      720
```

```
780
gctgtagacg gtctattcta ttctacccct attctactcg gttcgattct gttcctaaga
                                                                      840
aaatgeegat etegaeeeac ttgtaettee aegageggag etgeageeag eagetetgea
ggacceegea etgecegeea eegteeeete tggeagtgee tteeteetee egettteeee
                                                                      900
                                                                      960
aactgctcca ctcgaggaaa ccggaggaca ggttcagctc actgaaaggg gtcccaacag
                                                                     1020
aggtgaagat ccaagaaatg acgaagctgg gccacgagct gatgctgtgt gcgccagatg
accaggaget ceteaaggge tgtgeetgeg eecagaagea getacaette atggaecagt
                                                                     1080
tgctcgatac catccggagc ctgaccattg ggtgctccag ttgctcgagc ctgatggagc
                                                                     1140
                                                                     1200
acttcgagga caccaagggt caagaacgag gccttgctgg gggagctctt ctctaagccc
ccaacctgca gatgctcctg aatccagagt gcgacccgtg ggcccctgga catgcagccc
                                                                     1260
ctcctcaaca agcagagtga tgactggcag tgggccagtg cctctgccaa gtccgaggag
                                                                     1320
                                                                     1380
gaggagaagc tggcggacgt tgccaggcag ctgcaggaga gtgctgccaa gttgcacgcg
ettagaaegg agtaetttge acageatgag caaggggeeg etgegggeag caegaecate
                                                                     1440
agcaccetag accagaaget gegtetggte actteegact tecaccaget aatettgget
                                                                     1500
                                                                     1560
tttctccaag tctacgacga cgaagctggg cgagtgctgc caagcgccca ggccctgacc
teccaceceg tgeggeeece ateaateeca ggecaegeae caagaatett gaetteetae
                                                                     1620
agccaactgc tgcaagtggt catgacagtt gctgacacct ctgcgaaggc cgtggagacc
                                                                     1680
gtgaagaagc agcaaggccg agcagatctg ctggggtggc agcagctccg tcatgagtct
                                                                     1740
agetaceaag atgaatgaac taatggagaa atagaaagte tteagtgeat ggeetacgee
                                                                     1800
aaagcacagg atggggcggg caggaagccc tctcccaaga tcgagttggc cgaggatgga
                                                                     1860
tgattgtggc agcagaagcc gttgcagccc cacgttgttc tctaggcagg gacctttggc
                                                                     1920
ccctttgggg aggggggac cagacggggc gggtttggac ttgggacaca aagaaagcct
                                                                     1980
tggtttttaa gcaaaaaaaa aa
                                                                     2002
```

```
<210> 6128
<211> 3060
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (111)...(2148)
<223> similar to gi3559910 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6128
tttcgtgcag aacccgcggc cggctgagtc ctctccagcc gcgagaggcg ggctccagcc
                                                                       60
geggetegeg egetegetet gageeceege geecaggtgg gatggaagaa geetgteagg
                                                                      120
tgcagacaac taagcgaggg gatcctcatg agttaagaaa catatttcta cagtatgcca
                                                                      180
gtactgaggt tgatggagag cgttacatga ccccagaaga ctttgttcag cgctatcttg
                                                                      240
gactgtataa tgatccaaat agtaacccaa agatcgtgca gctcttggca gqaqtaqctq
                                                                      300
atcaaaccaa ggatgggttg atctcctatc aagagttttt ggcatttgaa tctgttttat
                                                                      360
gtgctccaga ttccatgttc atagtggctt tccagttgtt tgacaagagt ggaaatggag
                                                                      420
aggtgacatt tgaaaatgtc aaagaaattt ttggacagac tattattcat catcatatcc
                                                                      480
cttttaactg ggattgtgaa tttatccgac tgcattttgg gcataaccgg aagaagcatc
                                                                      540
ttaactacac agaattcacg cagtttctcc aggagctgca attggaacat gcaagacaag
                                                                      600
cetttgcact caaagacaaa agcaaaagtg gcatgattte tggtetggat tteagtgaca
                                                                      660
tcatggttac cattagatct cacatgctta ctccttttgt ggaggagaac ttagtttcag
                                                                      720
cagctggagg aagtatctca caccaggtta gcttctccta cttcaatgca tttaactcgt
                                                                      780
tactgaataa catggagctt gttcgtaaga tatatagcac tctagctggc acaaggaaag
                                                                      840
atgctgaagt cacaaaggag gaatttgccc agagtgccat acgctatgga caagccacac
                                                                      900
```

```
cactagaaat tgatatteta tatcagettg cagacttata taatgettea gggegettga
                                                                    960
ctttggcaga tattgagaga atagccccat tggctgaggg ggccttacct tacaacctgg
                                                                   1020
cagaacttca gagacagcag tetectgggt taggcaggec tatetggete cagattgeeg
                                                                   1080
agtetgetta cagatteact etgggeteag ttgetggage tgtgggagee aetgeagtgt
                                                                   1140
atcctataga tctggtgaag acccgaatgc aaaaccagcg tggctctggc tctgttgttg
                                                                   1200
gggagctaat gtacaaaaac agctttgact gttttaagaa agtcttgcgt tatgagggct
                                                                   1260
tetttggact ctacaggggt ctgataccac aacttatagg ggttgctcca gaaaaggcca
                                                                   1320
ttaaactgac tgttaatgat tttgttcggg acaaatttac cagaagagat ggctctgttc
                                                                   1380
cacttccagc agaagttctt gctggaggct gtgctggagg ctctcaggtc atttttacca
                                                                   1440
acccattgga gatagtgaag attegtetge aagtagetgg agagateace aegggaceea
                                                                   1500
gagtcagcgc cctgaatgtg ctccgggact tgggaatttt tggtctgtat aagggtgcca
                                                                   1560
aagcgtgttt cctccgagac attcccttct ctgcaatcta ttttcctgtt tatqctcatt
                                                                   1620
gcaaactact totggotgat gaaaatggac acgtgggagg tttaaatctt ottgcagotg
                                                                   1680
gagccatggc agggtgtccc agctgcatct ctggtgaccc ctgctgatgt catcaagaca
                                                                   1740
agactgcagg tggctgcccg cgctggccag acgacataca gtggtgtcat cgactgtttc
                                                                   1800
aggaagatte teeegggaag aagggeeete ageattttgg aaagggaetg eagetegagt
                                                                   1860
gtttcgatcc tctccccagt ttgggtgtta ccttggtcac ttatgaactt ctccagcggg
                                                                   1920
ggttttacat tgattttgga ggcctcaaac ccgctggttc agaaccaaca cctaagtcac
                                                                   1980
gcattgcaga cettecteet gccaaccetg atcacategg tggatacaga etcgccacag
                                                                   2040
ccacgtttgc aggcatcgaa aacaaatttg gcctttatct cccgaaattt aagtctccta
                                                                   2100
gtgttgctgt ggttcagcca aaggcagcag tggcagccac tcagtgatga gacaactgtt
                                                                   2160
gagtgtggca aaatggcgcc ttgaagaaag aggcctagga gagcagccct gtaatgtatc
                                                                   2220
cagtcagctg catggtactg actgagctga ggagtcaaac tettettet gtatgacata
                                                                   2280
tacatatact tgtttataaa ataatcattt gcccagggaa aaaaccacaa cgctgtttca
                                                                   2340
agetttagte ttatgtgttg aaatgttttt gtaageettg geatgaatta gtgttetaga
                                                                   2400
ctctgctttg cacagcttgc acttacagtg attgtacata ttgtacatct ttgtacagag
                                                                   2460
acatettgge aceteatece aacaaateae atttgtagaa atgtaatgeg gttetgagtg
                                                                   2520
gcttgaaatg tacagaatgt tttgaaagtg ttttattaag aatcacacaa aaataaatgt
                                                                   2580
attaaaatta aattcattct cttattggtg acttatggaa ataaagcatc aatattggat
                                                                   2640
gtatttaatt cctagtttgt tttccattct ggaataaaaa ggtatttgct gataaaaggc
                                                                   2700
ataacgagac atagtgctgc taccactgaa taagtgatac tttggaaaga tgcatgccag
                                                                   2760
tggatgccag aggaccaggc taatgacttg tgtgtgctga tgtgtttcca tttgtattta
                                                                   2820
atgtgtgtag accetectet gttcatcaat caaaaagcat ttcctaggca getectegee
                                                                   2880
tgtcagtgtg catatggaaa cagggacatc tccatcatta ctggcttagt tttgctttcc
                                                                   2940
tttgacacag taaggcaaag gccaagcttt caaaagagta aaggatactt tcacaatttc
                                                                   3000
3060
```

```
<210> 6129
<211> 2262
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (181)...(1499)
<223> similar to gi619491 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cttttaccqc ctgatctacq gctacaattc tqqcttcatq cccqcctcca aaaqtqcttc
                                                                      120
ctctcgaggg gttgtggttc ttactgcgca ggcgcaaaag caagtcctct tccgggcaaa
                                                                      180
atggcgatgg gactaatgtg cggacgccgg gagcttctgc gcttgctaca gtccgggcgt
                                                                      240
egggtecaca gegtegeagg gecetegeaa tggettggga aaccqetqae cacacqqete
                                                                      300
ctattcccag cagccccgtg ctgctgtcgc ccacactacc tcttccttgc ggcttccggc
                                                                      360
eccegcagee teagtacete tgetatetet tttgeagaag tecaggttea ggeceeteet
                                                                      420
gttgttgctg caactccctc acccacagca gtacctgagg tggcttctgg agagactgca
                                                                      480
gatgtagtec aaactgetge agageagage ttegetgaac tggggetggg gteatacace
                                                                      540
ccagtgggac tgatccagaa tttactggaa tttatgcatg ttgatctggg cctaccttgg
                                                                      600
tggggggcca ttgctgcatg tacagtcttt gcccgctgcc tgatttttcc tctcatcqtq
                                                                      660
acgggccagc gagaggcagc caggatccac aatcacttgc cagagatcca gaagttttcc
                                                                      720
agtcgaatca gagaggccaa gttagcagga gaccatattg agtattacaa ggcttcctcg
                                                                      780
gagatggcac tttaccagaa aaaacatggt attaaactct ataaacctct cattctccct
                                                                      840
gtgactcagg ccccaatctt catctccttc ttcattgctt tgagagagat qgccaacctt
                                                                      900
cetgtgeeca geetgeagae aggtggeete tggtggttee aggateteae qqtateeqat
                                                                      960
cccatctaca tattaccact ggcagtcact gctacaatgt gggctgttct tgagctaggt
                                                                     1020
gctgagacag gtgtgcaaag ttctgacctt cagtggatga gaaatgtcat cagaatgatg
                                                                     1080
cccctgataa ccttgcccat aaccatgcat ttccccacgg cagtgtttat gtactggctc
                                                                     1140
tectecaatt tgtttteeet ggtecaagta teetgtetee ggatteeage agtacgeact
                                                                     1200
gtacttaaaa tcccccagcg tgttgtacat gacctggaca aattacctcc acgggaaggc
                                                                     1260
ttcctagaga gcttcaaaaa aggctggaaa aatgctgaaa tgacgcgtca gctgcgagag
                                                                     1320
cgtgaacaac gcatgcggaa tcagttggag ctagcagcca ggggtccttt acgacagacc
                                                                     1380
tttacccaca accctctcct acaacctgga aaggataacc ctcccaatat ccctaqcaqc
                                                                     1440
cagcagcage ageagcaaac caaagtcaaa gtateeetgg cacgacacac ttggetgact
                                                                     1500
tatgttctgt gcgcattctg gcaggaattc tgtctcttca gagactcatc ctcaaaacaa
                                                                     1560
gacttgacac tgtgtccttg ccccagtcct aggaactgtg gcacacaqaq atqttcattt
                                                                     1620
taaaaacgga tttcatgaaa cactcttgta cttatgttta taagagagca ctgggtagcc
                                                                     1680
aagtgatett eccatteaca gagttagtaa acetetqtae tacatqetqe tteetqatae
                                                                     1740
ttattgaaca gggaaatgag tgtgcacttc agaaaactga agaataccca gcattttgqq
                                                                     1800
aggccgaggt gggtggatca cctgagatca ggagtttgag accagcctgg ccaacatggg
                                                                     1860
gaaacgccat ctctgctgtt ttacaaaaat agccacacgt ggtggtgcac acctqtaqtc
                                                                     1920
ccagctactc gggaggctga ggcaggagaa ttgcttgaat ccgagaggcg qaqqttqcaq
                                                                     1980
tgagccaaga tcgcaccacc gcactccagc ctgggcaata gagggagact gtctcaaaaa
                                                                     2040
aaaaagaaaa cctgaagaat agagtgagtc atgattgctt ttgctggccc atggccttgg
                                                                     2100
aaaatataat gttttaacct ggcattaagg gtttaaactt ccacccaggc gcagtggctc
                                                                     2160
acgccagtaa tcccagcact tttgggaggc caaggcgggc ggatcacgaa gtcagcagat
                                                                     2220
cgagaccatc ctggccaaca tggtgaaacc ccgtctctac ta
                                                                     2262
```

```
<210> 6130
<211> 2952
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (214)...(1112)
<223> similar to gi4455121 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

		actcagcagt				60
		gcacagacat				120
		aaaaagagag				180
		gatttttgct				240
		gataaagcca				300
		taattttgaa				360
		tattaaggaa				420
		tgaggcaata				480
		gtgtgtttgt				540
		cttaccaaag	_	_	_	600
		ccaaagattt				660
		aagatataga				720
agaagaactt	tcacttgctg	aaaatcaact	actaaaactt	ccagttcttc	ctcccaagct	780
cactttattt	aatgcaaaat	acaacaaaat	caagagtagg	ggaatcaaag	caaatgcatt	840
caaaaaactg	aataacctca	ccttcctcta	cttggaccat	aatgccctgg	aatccgtgcc	900
		tacgtgtaat				960
		aggctaatga				1020
		caatcgtcct				1080
aaaaagatta	ccgatagggt	catactttta	acctctattg	gtacaacata	taaatgaaag	1140
		gtctcaacaa				1200
attaaccttg	tatctcattt	tgaaggaatt	taatatttta	agcaaggatg	ttcaaaatct	1260
tacatataat	aagtaaaaag	taagactgaa	tgtctacgtt	cgaaacaaag	taatatgaaa	1320
atatttaaac	agcattacaa	aatcctagtt	tatactagac	taccatttaa	aaatcatgtt	1380
tttatataaa	tgcccaaatt	tgagatgcat	tattcctatt	actaatgatg	taagtacgag	1440
		aactctttgc				1500
		aaactttgaa				1560
ttcttttatg	attcatacgt	tattccttat	aaagtaagaa	ctttgttttc	ctcctatcaa	1620
ggcagctatt	ttattaaatt	tttcacttag	tctgagaaat	agcagatagt	ctcatattta	1680
ggaaaacttt	ccaaataaaa	taaatgttat	tctctgataa	agagctaata	cagaaatgtt	1740
		taatgtcttc				1800
		aagttttaaa				1860
agaaataatg	aaaagttcat	ccatttctga	taaagttctc	tatggcaaag	tctttcaaat	1920
acgagataac	tgcaaaatat	tttcctttta	tactacagaa	atgagaatct	catcaataaa	1980
		aaacagaata				2040
acccatacac	atccatgttc	actgtaacaa	actgaatatt	cacaataaag	cttctgagta	2100
acactttctg	attactcatg	ataaactgac	atggctaact	gcaagaatta	aatcttctat	2160
ctgagagtaa	taatttatga	tgactcagtg	gtgccagagt	aaagtttcta	aaataacatt	2220
		aaaagtatta				2280
aattatcagt	gttttagaaa	catgagtccg	gactgtgtaa	gtaaaagtac	aaacattatt	2340
tccaccataa	agtatgtatt	gaaatcaagt	tgtctctgtg	tacagaatac	atacttattc	2400
		ctgttttccc				2460
		acctcaagat				2520
agaacacaat	tattattcta	acaatgatta	ttagctcatt	cacttatttt	gataactaat	2580
		tttctcgtta				2640
aaacctcact	gagagcgcaa	aatgcagctt	tatacttttt	actttcaatt	gcctagcaca	2700
atagtgagta	catttgaatt	gaatatataa	taaatattgc	aaaataaaat	ccgtctaaat	2760
agaagggttc	tgttttattt	ggaaaaattg	aatctttaaa	ctatcataat	cttgaatgac	2820
tgtcatcttt	ctagttttca	gaaaaataat	gtattcctat	attatttta	tgataaaact	2880
		aataactctc	aaattaagaa	aaaattcaaa	agtcagtagt	2940
tttagataag	ag					2952

<210> 6131 <211> 1343

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(686)
<223> similar to gi4680707 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6131 cggacgcgtg ggcgcggctg ctcaagatga accgactctt cgggaaaqcg aaacccaaqq 60 etcegeegee cageetgact gactgeattg geaeggtgga cagtagagea gaatecattg 120 acaagaagat ttctcgattg gatgctgagc tagtgaagta taaggatcag atcaagaaga 180 tgagagaggg tcctgcaaag aatatggtca agcagaaagc cttgcgagtt ttaaagcaaa 240 agaggatgta tgagcagcag cgggacaatc ttgcccaaca gtcattcaac atggaacaag 300 ccaattatac catccagtct ttgaaggaca ccaagaccac ggttgatgct atgaaactgg 360 gagtaaagga aatgaagaag gcatacaagc aagtgaagat cgaccagatt gaggatttac 420 aagaccagct agaggatatg atggaagatg caaatgaaat ccaagaagca ctgagtcgca 480 gttatggcac cccagaactg gatgaagatg atttagaagc agagttggat gcactaggtg 540 atgagettet ggetgatgaa gacagttett atttggatga ggeageatet geacetgeaa 600 ttccagaagg tgttcccact gatacaaaaa acaaggatgg agttctggtg gatgaatttg 660 gattgccaca gatccctgct tcatagattt gcatcattca agcatatctt gtaaaacaaa 720 cacatattat gggactagga aatatttatc tttccaaatt tgccataaca gatttaggtt 780 tettteettt etttgaagga aagtttaatt acattgetet titattittt ceattaagag 840 actcattgct tgggaaatgc tttcttcgta ctaaaatttg attccttttt ttcttatqaa 900 aaacgaactc agtttaaaag tatttttagc tcgtatgact tgttttcatt cattaataat 960 aatttgaaat aaaactaagg aaatggaatc ttaaaagtct atgacagtgt aactctacag 1020 teteaaaatg acetgataaa ttgataagae aaagatgaga ttattgggge tgtteatatt 1080 atgattcaga atcattttct attgtggtat tataggttgg ttaaagtgat ggcctttttg 1140 atgggttttg ttgtgtcttg tgaacaagtc gttactgtgt ccattattgg aatggaatta 1200 tcactactgt atcatgagtg ggtattttga ttctatggtt ccctcagtat tacatcttga 1260 cttgtaatca attatgaata tttcttgata tttaatgtat aggacattta tttatactca 1320 ataaatattt ttcaaaaaaa aaa 1343

```
<210> 6132
<211> 3730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (237)...(1849)
<223> similar to gi4581470 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6132
tttttttttt ttagcaacac ttttcttgtt tgtaaacgcg agtgaaccag aaagtgtgaa 60
```

```
tgcggagtag gaatattttt cgtgttctct tttatctgct tgcctttttt agagagtagc
                                                                      120
agtggttcct atttcggaaa aggacgttct aattcaaagc tctctcccaa tatatttaca
                                                                      180
cgaatacgca tttagaaagg gaggcagctt ttgaggttgc aatcctactg agaaggatgg
                                                                      240
                                                                      300
aagaaggagc caggcaccga aacaacaccg aaaagaaaca cccaggtggg ggcgagtcgg
                                                                      360
acgccagccc cgaggctggt tccggagggg gcggagtagc cctgaagaaa gagatcggat
                                                                      420
tggtcagtgc ctgtggtatc atcgtaggga acatcatcgg ctctggaatc tttgtctcgc
caaagggagt gctggagaat gctggttctg tgggccttgc tctcatcgtc tggattgtga
                                                                      480
egggetteat cacagitgig ggageeetet getatgetga aeteggggte aacateeeca
                                                                      540
aatctggagg tgactacttt tatgttaagg acatcttcgg aggactggct gggttcctga
                                                                      600
                                                                      660
ggctgtggat tgctgtgctg gtgatctacc ccaccaacca ggctgtcatc gccctcacct
tetecaacta egigetgeag eegetettee ceacetgett eeececagag teiggeette
                                                                      720
ggeteetgge tgecatetge ttattgetee teacatgggt caactgttee agtgtgegga
                                                                      780
gggccacccg ggttcaagac atcttcacag ctgggaagct cctggccttg gccctgatta
                                                                      840
tcatcatggg gattgtacag atatgcaaag gagagtactt ctggctggag cccaagaatg
                                                                      900
catttgagaa ttttcaggaa cctgacatcg gcctcgtcgc actggctttc cttcagggct
                                                                      960
cctttgccta tggaggctgg aactttctga attacgtgac tgaggagctt gttgatccct
                                                                     1020
acaagaacct teccagagec atetteatet ceateceact ggteacattt gtgtatgtet
                                                                     1080
ttgccaatgt cggcttatgt cactgcaatg tccccccagg agcttgctgg catcagaacg
                                                                     1140
ccgtcgctgt gacttttgga gagaagctcc taggagtcat ggcctggatc atgcccattt
                                                                     1200
ctgttgccct gtccacattt ggaggagtta atgggtctct cttcacctcc tctcggctgt
                                                                     1260
tettegetgg agecegagag ggecacette ecagtgtgtt ggecatgate cacgtgaage
                                                                     1320
gctgcacccc aatcccagcc ctgctcttca catgcatctc caccctgctg atgctggtca
                                                                     1380
ccagcgacat gtacacactc atcaactacg tgggcttcat caactacctc ttctatgggg
                                                                     1440
tcacggttgc tggacagata gtccttcgct ggaagaagcc tgatatcccc cgccccatca
                                                                     1500
agateaacct getgtteece ateatetact tgetgttetg ggeetteetg etggtettea
                                                                     1560
gcctgtggtc agagccggtg gtgtgtggca ttggcctggc catcatgctg acaggagtgc
                                                                     1620
ctgtctattt cctgggtgtt tactggcaac acaagcccaa gtgtttcagt gacttcattg
                                                                     1680
agctgctaac cctggtgagc cagaagatgt gtgtggtcgt gtaccccgag gtggagcggg
                                                                     1740
gctcagggac agaggaggct aatgaggaca tggaggagca gcagcagccc atgtaccaac
                                                                     1800
ccactcccac gaaggacaag gacgtggcgg ggcagcccca gccctgagga ccaccattcc
                                                                     1860
etggetacte teteetteet ecceettta tectacetee etgeettggt eccgeeaaca
                                                                     1920
catgcgagta cacacacacc cetetetetg ettttgtcag gcagtggtag gaetttggtg
                                                                     1980
tgggtggtgt gagaaattgt aaacaaaaac tgacattcat acccaaagaa ccagcctctc
                                                                     2040
accccagggt ccatgtccca ggccccactc cagtgctgcc cacactccca gctgctggag
                                                                     2100
gagagggag atgccaaggt gcctgcagg acctccctcc gggccacacc ctcagctgcc
                                                                     2160
tcttcaggaa ccggagctca ttactgcctt ccctcccagg gaggcccctt cagagaggag
                                                                     2220
aggccacagg agctgcattg tggggggaca ggctcaagca attctgtccc catcaagggg
                                                                     2280
tcagctggag agacccaaga ccctatctgt tcaccaggga cccaaaatcc aaggggatgc
                                                                     2340
ttccctctgc cctctttcct gcccctcccc atcatacctg cacccacccc agccagggct
                                                                     2400
ccctgtccag aattcggttc tcctcaggac gccaactccc agagctaagg accaaggaga
                                                                     2460
agaacagcct ctccaccccc aagccaggcg gttgaggaac atattgagaa aggttcagat
                                                                     2520
tgcagaaacc cagccctgcc cctgcctcct gcatccagcc cccaacatgg tgccaaagct
                                                                     2580
tccagaagcc aaaaagcttc tgatttttaa ggtagtgggc atctctctcc taatgacgaa
                                                                     2640
gctgctcagc aactccacct gcccgccgca ggaaggagca gtcccctgct atccctgcag
                                                                     2700
ccacteccag cacaceegca cacageeage accaeegece ecaeegtgea etteteetet
                                                                     2760
etgggeettg gettgggace aggtaegaag gateeceaag eeetteagge etgagateag
                                                                     2820
agccagatca gccttaagtc acctcccatc caagaacttg gcctaaaaat actcccctat
                                                                     2880
ttctaaccct caggacggat ctgatattaa atgccttccc tgggaggaag ggtgctttcc
                                                                     2940
ccctccctag aggtgcccat tccataccct gggagactga ggagagcatt ggctgaagcc
                                                                     3000
cagtteettt eccatecate eccaacteca ataateeece aeteetegea ggteteagtg
                                                                     3060
teatgetgte ttggggeagg gtgaaagggt agtggeagea gggegeeeae tetggagate
                                                                     3120
ctcaaaaaag gccctcctct gtggctggca gcctctgacc tttccctggg cttcaaagga
                                                                     3180
aggetatgga gtttgctgtg ggccctgcaa ccttcccagc cactcctgct gcactaagga
                                                                     3240
cttaggatcc ttttatcaca aatcgggatt ctctccccca ccccgaattc tgtctgctta
                                                                     3300
aactggaata cacaggagce cttectggce tggatggtgt eteccagett eecegeecag
                                                                     3360
cttgcccacc ccatagttgg tgagatgcca agtttggtct gagttgtgac cccttcagag
                                                                     3420
tagatgeeeg geaggetggg gttggeeeet ggagggteag gggaeeatet tettatteee
                                                                     3480
```

```
<210> 6133
<211> 4082
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (237)...(1926)
<223> similar to gi3714340 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6133

ctcaggcccg agaggcgccg ggcggcggga tttaggctgt tccggagggg agggccgggc 60 gcggcggcgg cggcggtgga ggagccggag cataatgcta aagaagtaaa caggtcatgg 120 cacgtttaac aaaaagacga caggcggata caaaagctat ccagcatctt tgggcagcca 180 ttgagattat acggaaccag aagcagattg ccaacattga ccgtattaca aagtatatgt 240 ctcgagtcca cggtatgcac cctaaagaga ccacccgtca gctgagctta gctgtgaaag 300 atggtcttat tgtcgaaact ctaacagtgg gctgcaaagg ttcaaaagct ggtattgaac 360 aagaaggata ttggttgcca ggagatgaga ttgactggga aacagaaaat catgactggt 420 attgttttga atgccatttg cctggagagg tgttgatatg tgacctgtgt tttcgtgtgt 480 atcattccaa gtgtttgtct gatgagttca ggcttagaga cagcagtagt ccctggcagt 540 gcccagtttg caggagcatt aagaagaaga atacaaacaa acaggagatg ggcacatacc 600 tcagattcat tgtctcccgc atgaaggaga gggctataga tcttaataaa aaggggaagg 660 acaataaaca cccgatgtac aggaggctgg tgcactcagc tgtggacgtt cccaccattc 720 aagagaaagt gaatgaaggg aaataccgaa gttatgaaga gttcaaagct gatgcccaat 780 tgcttctcca caataccgtg attttctatg gagcagacag tgagcaagct gacattgcga 840 ggatgctata taaagacaca tgtcatgagc ttggatgaac tgcagctttg caagaattgc 900 ttttacttgg caaatgctcg tcctgacaac tggttctgtt atccttgtat acctaatcat 960 gagctggatt gggctaaaat gaaaggtttt gggttttggc cagccaaagt catgcagaaa 1020 gaagacaatc aagtcgacgt tcgcttcttt ggccaccacc accagagggc ctggattcct 1080 tctgaaaaca ttcaagatat cacagtcaac attcatcggc tgcacgtgaa gcgcagtatg 1140 ggttggaaaa aggcctgtga tgagctggag ctgcatcagc gtttcctacg agaagggaga 1200 ttttggaaat ctaagaatga ggaccgaggt gaggaagagg cagaatccag tatctcctcc 1260 accagtaatg agcagctaaa ggtcactcaa gaaccaagag caaagaaagg acgacgtaat 1320 caaagtgtgg agcccaaaaa ggaagaacca gagcctgaaa cagaagcagt aagttctagc 1380 caggaaatac ccacgatgcc tcagcccatc gaaaaagtct ccgtgtcaac tcagacaaag 1440 aagttaagtg cctcttcacc aagaatgctg catcggagca cccagaccac aaacgacggc 1500 gtgtgtcaga gcatgtgcca tgacaaatac accaagatct tcaatgactt caaagaccgg 1560 atgaagtcgg accacaagcg ggagacagag cgtgttgtcc gagaagctct ggagaagctg 1620 cgttctgaaa tggaagaaga aaagagacaa gctgtaaata aagctgtagc caacatgcag 1680 ggtgagatgg acagaaaatg taagcaagta aaggaaaagt gtaaggagga atttgtagaa 1740 gagatcaaga agctggcaac acagcacaag caactgattt ctcagaccaa gaagaagcag 1800 tggtgctaca actgtgagga ggaggccatg taccactgct gctggaacac atcctactgc 1860 tecateaagt gecageagga geaetggeae geggageaea agegeaeetg eegeeggaaa 1920

```
agatgaaget ggeeetteee ggagteaeee egatgattae tetttteaga cacageggtt
                                                                     1980
tttgtttcca agaagccaaa attgtttaga atttgcttcc cattttgcac cagcctttaa
                                                                     2040
acacttttcg tgaagaaatt ttgcacagta gtttaaatct tttgttaatg ctcctccqaa
                                                                     2100
gtttttcagg gggtaaaagt aacatcagtg gagggtatta ttttaaataa attttaattg
                                                                     2160
agaatttgtt gcattttcag caaattttaa aacattttta ggttttacag agattttaac
                                                                     2220
Ctttaaacaa cagatcttta aaaaacaggt gaatacaagt gagtttaaca aagaaacatt
                                                                     2280
tagaatagat ctgaatgtaa gaactacaga actgtttcag aaataaaaca tactaccttg
                                                                     2340
atgtgacatt tttttcttaa ccttgttgag ctggttttgt tcagcttaat ttactgttca
                                                                     2400
aaggcattat ctgttggtca caccagtggg tatatgattg aatttaggga acagggttga
                                                                     2460
cacagcaggg ctagtcctgc atattttttc ttaaatattt cccaattgtg tttttcatta
                                                                     2520
tttcttttca atataaact tttataacaa attattagct ttgatcttgt agtttaaaat
                                                                     2580
tgcagggaac tggggtaatc ttttactgag ctggatctta gagaaaatga atatttaaat
                                                                     2640
tttaaagttt gcacatttca tctttgtcct aacatgagtg cttgtaacaa aataaacaac
                                                                     2700
aaaaacaaag ccaaaaacta cctttatcca tatgtgaaat tatagatgag gcatacgaat
                                                                     2760
ttgtttaatg cttcccttcc cttcccacat atcatctcac tgcctattat ctggtgtcac
                                                                     2820
ctcatgtatc gtaagttaat actaaaagaa gagaaagcac ttaagtttca cagaagccgt
                                                                     2880
tatgtttgta gtaatgggtc attgcctact aatgaactcc atcactgtac acagaatgaa
                                                                     2940
gaataatgca tgttaatttt cttqtattaa aqatqccqtq atttqtaaaa aqtctqtatt
                                                                     3000
ttgcggaatg tctggattaa gaagcattac caataggaat ggatcgatag ttgaataatg
                                                                     3060
attitttata catagatata taaaatacag ccaggaaaac ttaaattact ttictittaa
                                                                     3120
aatatctcac aatttatgtg gtatttttaa agactgatct tagaccaagt caaattccca
                                                                     3180
tttatcattt agttatttt tgaggttaga gaataatttg tacatattta tttagacctt
                                                                     3240
tgatatttat taaagcaatt actcacaatg gaagtgaaag aatcaggaga aaagcctttt
                                                                     3300
aaaaagtatt ctccaggttt gtcagggtca ctctaaagat aaaaatqtaa ctaaqtcttc
                                                                     3360
tgtgaaatat catccatcta atcttgatgc tgttgcagat ggtggtgaca caagttaatt
                                                                     3420
gacaaactac tgccaaatgg tgcacaatat tttgtaaaaa gtacccagta gccccatttc
                                                                     3480
atacaatgta cctaaattat gcagtaactt ggcatcatcg ttccctcctt gttgctgtgt
                                                                     3540
aattagtcag tgttgccaca gtgtgtggcg ctgatggaga tgtcagaacc gagaacactt
                                                                     3600
aaccttcttt gattgttttt caagttttaa gacttcgatc cacccctatg agaqcaagta
                                                                     3660
attgtggaaa tatttttggt gtaaaatcat tccagagtat gtaatattta actgatagct
                                                                     3720
gcatgaaagt gagattcgtg ttactttggc ttttctgtct ctgttgacac ggttgcacat
                                                                     3780
ttccaagtta ctacagcgtg aaaactgtgt gtttaaaaaa aaacaaaatt aaaaaaagag
                                                                     3840
attgtggcct ggttttgtaa aagttttagg taaaattaca attgattgtt ttaggaatca
                                                                     3900
ttattaaaaa ttttctgcaa atcataaagc tatatcgagg tgttgagctt agccactatg
                                                                     3960
cacattgtaa ttattcattg tggctgtcca gttctatgat gcattctggc attttgtaag
                                                                     4020
ctgctctgac tagcaatata tagattcatt taatgtgtta acattggtta ataaatgtat
                                                                     4080
tt
                                                                     4082
```

```
<210> 6134
<211> 4700
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4171)...(1892)
<223> similar to gi3116015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6134

```
tttttttttt tttaagtcag aaacaggaaa cgtttattta aatagtgtag tcttaatttc
                                                                       60
tttaatataa aacccccca aatctgatga aaacaaagtt ttatatacca tataaacaag
                                                                      120
atttgtcaga tttgaaagtg aaagttaaag taatttacag ttagctttta accctctcgg
                                                                      180
gacatttaga tacatcctcg ataatccatc ttgtaattag tgtgtgtcaa ttttacaata
                                                                      240
                                                                      300
cactggggga aaactcaggc tattgtattt aacgggtaca gtttcattta tcaaagtgtt
teccattaat teccattatt aggtggacag etaaccaagt gaceccatca aaatgaagtg
                                                                      360
aatgacatta gactgtggcc agagtgaacc acatctggga ttggctttct ataattcacc
                                                                      420
                                                                      480
cagtttgcgg ggaagtaaac attctttgga tttgttcata atatactgaa gttacctata
acactggtgc agtaacacag ctagttcctc tgtattqgtt atgggtaaga acqqqatttt
                                                                      540
ggtaatataa agttaacagg aaaaaaatgc ttcacacatt atgtggtgga aacttatctc
                                                                      600
                                                                      660
cacaaaaaga ccattaaaat aaaaaggata gagggaaaaa taaaccatgc agaagagacg
gettececca tettecaace tgttteccat gggeteacte attgeccata cateacttge
                                                                      720
cacactatca agtgactcct ttctgctttg gtgacagaag gttcaagtgg aagatcctct
                                                                      780
ccaagaagtt ctgattctcc accttcatca cccattcgga agtcgatgta gccctctcct
                                                                      840
ccactgatga caagcataga cttcaagggc gtctgactac caggctcctg tgcagatggc
                                                                      900
ccctgccttt gtcacccgtc agatccgtgc cactactgct actttgtggg ctgatgactt
                                                                      960
gacctgggac tgccacaag aatttcacag catcceggtg cccatggaag caaagctgtg
                                                                     1020
catgtgccat tgaacaatag ggtataaatg tccctggagt cactttatca ctqttttcat
                                                                     1080
caccatatac acggattaca cttccaggac gatttcctgg tacacctgag gttttatttg
                                                                     1140
ccctcagccc cagtaaacgt ccctggtgga ggattacggt ttctgtcaat gggatggaga
                                                                     1200
taatgacacc atttcctgtc cccacccaca aacgattaca agacaccata agagctgtaa
                                                                     1260
ttctcacaaa agagaagccc agttttccag tacctaacat tttgcttaca taaggctcaa
                                                                     1320
tgtccacatc ctgtagatgt tgataagtgt gtgcatgata gagacggagc gtagaatcca
                                                                     1380
agegaatgga gacccacacg ccatececca cccacgcaag etgtegcact tggeteteet
                                                                     1440
tcctgggatg tgcatcaaaa gatttctcta ttttcatggc ctttggctgc accacataga
                                                                     1500
ttttgttcct atagccacac cagactttgt catgtaccac agtcatgcaa cggatggaat
                                                                     1560
gatgaggccg tccaaggtct aagaggtgat agtttgacaa atcccactgc ccatccactc
                                                                     1620
ctctgtgaaa gattgcaagg gtgccgtcag ccagggctac taacacgatt cccttcacgt
                                                                     1680
gtacaatact gagaatcgaa tctttaagtt taatggaatg gagacatttc ctccactggg
                                                                     1740
ctacagatga atggacatac aaacagccat tttgagctcc aagccacata gttggtaaaa
                                                                     1800
gactactcat tttctgggct tcttctctca ccaagtcttg ttcatttggc agtactgata
                                                                     1860
tttgatcttt atatgcatct gagtcattgc tcgactgata cactggggag aggtcttctg
                                                                     1920
ggatctgaac ttcccaaagg atctgtaaag acatgctctg tgtagacgcc agtttgggag
                                                                     1980
atgtecaact gtgtetteag etgaceeege attecettet gtagetteag ttgetttett
                                                                     2040
ctgctgttgg aacattttca tcaacctcac tattttctgc ttccatttct ggtggtttat
                                                                     2100
ccatcactgg agaagcacca tttgtactag gggaagtggc agctcccgtc acaccttctg
                                                                     2160
cagaacaacc aaccactgtg atgectecta acaggetgte tgtetetget gagetgttge
                                                                     2220
ttgtcatact tccacataaa gatgctttgt ctacctgacc agattctgaa agatcttctc
                                                                     2280
ctgcagggta gtctgtttct cgtgcacctg gcacacttgc aatgcacaga acatgagagt
                                                                     2340
tgcaaacagt gaaactgtct aggatgttgc caggttgaac agcatcaata ataagaactt
                                                                     2400
ttgtageega atgagtgetg gtacagatee aaactagaet ggataattet tettgatttt
                                                                     2460
ttaactcctt ctgctgttcc ttaagttcct gatctaactt atctaaacta ctctgagagg
                                                                     2520
cacttegetg tttactgect tetgtateca aaccageaac atcettgtaa aatacaettg
                                                                     2580
etecaacaac agaaccaeca tetetggtet teccaecaga taaattgaet ecaacagcae
                                                                     2640
accacagett cattgatgta tetttttat ecagaggtet gagatagaca ggeacaggta
                                                                     2700
aatttttcat cttattttca ccttgaccat tggttacctg tttgtacttc tgaggcaqac
                                                                     2760
tccagccaaa agcctgcact ctaccgtctt ccttctgaac atgtgctttt acctgacgat
                                                                     2820
actgetetet ettttgttet etgegtgagg etaaactage tteagtttet teactaagga
                                                                     2880
aatcaaaggc tttggactta tccccaggga gctgagataa ggtgctgctt cttttcttga
                                                                     2940
cggacggagt aacatgagac gtgggtgcat tgtacttcag attaacaggt ggttcaggct
                                                                     3000
tcttagtcgt gttacttgag gagctgaaaa gtcggctaaa aaactgccaa atgcttgacc
                                                                     3060
tttttttttc ctgcatggct ggattttctc gtgatgcccg aatcatctct gtccatcgaa
                                                                     3120
cagetteetg aageteeate aatetetett tataetggtt tegeteeatg agaacaeggg
                                                                     3180
ccatttctac tctagtaaac cgtttcctct gggctgtggg aatatcacta tcatcgtcat
                                                                     3240
cttttgcttt ttgccttgca tcttcagctt ctgcccgagc tttcctaagc tcttcctcca
                                                                     3300
attetetgtt etttteetet agttteagtt tggettgett caeageetee aatteeett
                                                                     3360
gcagcacatc tttctcacag gtcagttcat ccacttttgc tatcaaatca ttcttcacta
                                                                     3420
```

```
3480
tgttcaaagc atttttggtt tccaacagtt gtgtattttc taatataaga ttctcaactt
cccgacccat tcctagtaaa tctgctcctt catccacatc tcctattagg cctgagccag
                                                                     3540
ctgaagacag ttcttcaaag agagattctg tattgcgatc aaaagctttg ttctctatgc
                                                                     3600
ctttggtggg agtgcttgaa cctttatatc cactgagatc tttgtccata tccagctcag
                                                                     3660
gagtagattc gatgattgct tgaacttctg acttttcttc attttcagca gagccagtag
                                                                     3720
atacatttct agtttcctgg gctacctgta cttcaatgtg tttgcttatc tctgatttat
                                                                     3780
ttggcgcatc tgtaaccttc acaaatcctt cgttttcttc ctttaaggga gtatcagtag
                                                                     3840
gaattgttgc cacatctgaa ttagctgttg atgctggagt ggtagcttta gatccgcctt
                                                                     3900
ggctaacatc agaaagctca tccttcaggc tggtatgaga acgtggttga cttaattcct
                                                                     3960
                                                                     4020
gaaattteca ttgeteagat eeaggggtet eteeteettt etgageatea ggtgtaagea
atccatctcc agcaggtaat gggaaaattc ctaatgatat agggcgttct tttctaattc
                                                                     4080
tactatgage tgtggattet agttgateae teeetgagag etgatgaagt tttgttettt
                                                                     4140
ctaaatgttc catataatta tggatcatct cagtgtgtct ttgatgtaat gcattatatt
                                                                     4200
cettetteag ttetgettet etttetteaa gtatgetaat etggteagea tagttttteg
                                                                     4260
ctttcagctc aagttgtctt gtttgagatt ctaaagattc cactcgggtc tgtaagtcct
                                                                     4320
ttttttcctg ttcttgagag tcttcaaatt caatgaattt ctcctcagcg tgcttgcgca
                                                                     4380
gegeettete tegetegtae tgggtgatga getgetegtt gtegteeege ageageteea
                                                                     4440
getecacetg gtgeteetgg teetgegega acacegagte caggitetee ageacageca
                                                                     4500
ccaccagegg gateagetet ttgaccacet cetegteata gegeacgata ageegetega
                                                                     4560
actegeggta gatggageeg geeaggeegg acaceegete egacateaeg geeeeggage
                                                                     4620
cgccgggctc ctcctgatac accacaccgt cctccagctc catggttggc aagcggacgg
                                                                     4680
                                                                     4700
gcgggcggcc cggggcgtcg
```

```
<210> 6135
<211> 1926
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (264)...(1289)
<223> similar to gi1628581 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6135
tttcgtccgc tgcctgccct gctccaggct ccacctgtgc cgccgatcgc ccgggtatcg
                                                                       60
egggggeeca ggeeagetga gteegtttte egegeegggg tggegeecet ceaacegtee
                                                                      120
taacgccggg ccggcagcaa ggagtgttcc tgggacctca gagaccaggc tcagagcctg
                                                                      180
acatecetge gaggggacag ceteateege ecaggecagt gggggtetet acaagtgece
                                                                      240
aggeteaggt geageeeca geaatgeate geeggagaet ggeeetgggt etggggttet
                                                                      300
gcctgttggc gggcacaagc ctcagtgtcc tgtgggtgta tcttgagaac tggctgccag
                                                                      360
tctcctatgt cccctattat ctcccctgcc cagagatctt caacatgaag ctgcactaca
                                                                      420
agagggagaa gccactccag cccgtggtat ggtcacagta ccctcagccc aagctgctgg
                                                                      480
agcacaggcc cacacagctg ctgacactca caccctggtt ggcgcccatc gtctccgagg
                                                                      540
gaacetteaa eecagagett etgeageaca tetaceagee actgaacetg accattgggg
                                                                      600
teaeggtgtt tgeegtgggg aatcetteet ggagteagee gaggagttet teatgegtgg
                                                                      660
gtaccgggtg cactactaca tcttcactga caaccctgca gccgttcccg gggtcccgct
                                                                      720
gggteeccae eggettetea getecatece catecagggt cacteccaet gggaggagae
                                                                      780
atccatgcgc cggatggaga ccatcagcca gcacattgct aagagggctc accgggaggt
                                                                      840
ggactacete ttetgeettg atgtggacat ggtgtttegg aaceegtggg geeetgagae
                                                                      900
```

```
960
cttgggagac ctggtggctg ccattcaccc aagctactac gccgttcccc gccagcagtt
cccctatgag cgcaggcgtg tttccactgc ctttgtggca gacagcgaag gggacttcta
                                                                     1020
ttatggtggg gcagtcttcg gggggcaggt ggccagggta tatgagttta ctaggggctg
                                                                     1080
                                                                     1140
ccacatggcc atcctggcgg acaaggccaa tggcatcatg gctgcctggc gggaggaaag
                                                                     1200
ccacctgaac cgtcacttca tctcaaacaa gccgtccaag gtgctgtccc ccgagtacct
                                                                     1260
ctgggacgac aggaagcccc agccacccag cctgaagctg atccgctttt ctacactgga
                                                                     1320
caaggatatc agctgcctga ggagctgacc acggagctgg gggttgccat ggatggggac
ccaaagacct gcagccacca gtgcttcact agcgtgcaga ccagccctgt cccgcctccc
                                                                     1380
tgtcagtcag gcgaattcaa ccggaaaagg gacgtggaaa ggccactgtg aactgcagag
                                                                     1440
                                                                     1500
ggctgtgcac acagtagcac acaggatctc acagtaacgc ggcatgggaa cagtgagaca
gggggaggg aggcgcagtt acaaaggcag ggcccggcag gcttgccacg ttctgcagcc
                                                                     1560
                                                                     1620
gtgcctttgc ggggcaggct ctgaagcctc agcccgactc agagtgcctg aaccctgccg
                                                                     1680
egecagtece cegtttattg catattgece ttaacgtage atttetaata ecetggtgtg
aaggegeeet agacceettt tetetggtea caggggteet gggteetttg atgteteeea
                                                                     1740
accacatgta gccaattcct cactcaggcc cccagagtga gcctttgaaa tggaacaggt
                                                                     1800
ctaggetece teggtttect geaceceaaa gtgageegea eteteagggg actageeace
                                                                     1860
teettettaa gagggtttgg ggeagtttat aataaagggg gegtgtgete aaceetaaaa
                                                                     1920
                                                                     1926
aaaaaa
```

```
<210> 6136
<211> 1620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1204)...(236)
<223> similar to gi5360708 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6136 ttttttttt ttacaaaacc aaaaaccaa aaatatttta ttgctgagtc atcctggggt 60 tecataaagg acceeaagee ttgettggag tetatagett tgetaggaet eecatgaeat 120 caggatagag attgaggcac ggggtccttt gggttccgat taaggaacta tctactctga 180 ttetgttgat ettattagte eeteeaggte acetetaett eatetgteeg atacetetgt 240 gtaaccccag aatcactgag tggggtcctg tgtccagccc gaaacatctc ccagccagcc 300 tgggctatca tcgctccatt gtcaatacag aatctctcat ctgtagcaaa aagccgggct 360 ccacgttect ggcacattgt tgccatcate teetgtagee teacattaca ecceaeteet 420 cccacaatga gggcctcctg ggagccacaa tgtgccatgg ctcggctctg tgatctctac 480 cagcattgca aacacagttt cctgcaggga gaaacgcaga tcctcaggag tacactcgcc 540 tgtggccagc atccgatggg ctacatcctc aatgaaagac aggatccctg agaatgagac 600 gtccatcccc tttacagtgt atggcagctc aactagcttc ttgcctcgct ttgccatctg 660 ttcaatgttg tatcctggac ttgggtcgtt agaaatcttc agcactcgag caaaacgatc 720 cagacaatta cccactgcaa tatcgatggt ttccccaaag atacggtaac gatgttccga 780 gtatgcaatc acctgcgtat ttcctccact cacatacaac acggttgggc tggtggctcc 840 agtgatgagg cggcccatct caatgtggcc tatacagtgg ttcacaccca ccaatggctt 900 attccacage tgggccacag tacgggccac aacagccaca gaaaccagtg gggcacccat 960 gccagggccc ttggtgtatg caatgcagtc gatatcctgg gaggttaatc cagactctgt 1020 tagtgeetee tgeageaggt etaggataae ageteggtga tgeetggetg tateaeetgg 1080 aaggaateet gtgecaggag gegtgaegta agteegeege gggttegeea geacettgee 1140

```
atcccgcacc acgcccacgc caatcttatt ggcgctgcct tcaaaaccca gcaccgccgg
                                                                     1200
catggcggag gctgggagaa aacgccgaca ggactcctgg caatgtcagg agctgtggag
                                                                     1260
gtcctcacta gtccgcgctg ggccgcagct ttccggagcg cagaggaagc tggccagcct
                                                                     1320
                                                                     1380
gcagatagca ctgggaaaga caccgcggaa ctcccgcgag cggagacccg ccaaggcccc
tecagggace tgtetteeta actgeeaggg acgeegagee aactetgtge ettacatteg
                                                                     1440
tatecetttt cetatetett teeegtggte eageceagee ttetecaetg ttttttteee
                                                                     1500
tettgeacag agttagaate ttaagteagt gteacacaat gtgetgtgea tetggeacaa
                                                                     1560
cgataaacag cccgagggag ggttgacgag atcgtcgtcc cggaaattcc gggagtgcac
                                                                     1620
```

```
<210> 6137
<211> 4224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (162)...(3960)
<223> similar to gi3882335 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6137 gatgattacg ccaaggttgg cacgagggtc tcctggaatg cctggagttt gaccctgaag 60 agttctacca ccttttagaa gcagctgagg gccacgccaa agagggacaa gggattaaat 120 gtgacattcc ccgctacatc gttagccagc tgggcctcac ccgggatccc ctagaagaaa 180 tggcccagtt gagcagctgt gacagtcctg acactccaga gacagatgat tctattgagg 240 gccatggggc atctctgcca tctaaaaaga caccetetga agaggaette gagaccatta 300 ageteateag caatggegee tatggggetg tatttetggt geggeacaag tecaceegge 360 agegetttge catgaagaag atcaacaage agaacetgat cetaeggaac cagatecage 420 aggccttcgt ggagcgtgac atactgactt tcgctgagaa cccctttgtg gtcagcatgt 480 tctgctcctt tgataccaag cgccacttgt gcatggtgat gggagtaccg ttgaaggggg 540 agactgtgcc actctgctga agaatattgg ggccctgcct gtggacatgg tgcgtctata 600 ctttgcggaa actgtgctgg ccctggagta cttacacaac tatggcatcg tgcaccgtga 660 ceteaageet gacaacetee taattacate catggggcae atcaagetea eggactttgg 720 actgtccaaa atgggcctca tgagtctgac aacgaacttg tatgagggtc atattgaaaa 780 ggatgcccgg gaattcctgg acaagcaggt atgcgggacc ccagaataca ttgcgcctga 840 ggtgatcctg cgccagggct atgggaagcc agtggactgg tgggccatgg gcattatcct 900 gtatgagttc ctggtgggct gcgtcccttt ttttggagat actccggagg agctctttgg 960 gcaggtgatc agtgatgaga ttgtgtggcc tgagggtgat gaggcactgc ccccagacgc 1020 ccaggacete acetecaaac tgetecacea gaaceetetg gagagaettg geacaggeag 1080 tgcctatgag gtgaagcagc acccattctt tactggtctg gactggacag gacttctccg 1140 ccagaaggct gaatttattc ctcagttgga gtcagaggat gatactagct attttgacac 1200 ccgctcagag cgataccacc acatggactc ggaggatgag gaagaagtga gtgaggatgg 1260 etgeettgag atcegecagt tetetteetg etetecaagg tteaacaagg tgtacageag 1320 catggagegg eteteactge tegaggageg ceggacacca ecceegacca agegeagect 1380 gagtgaggag aaggaggacc attcagatgg cctggcaggg ctcaaaggcc gagaccggag 1440 ctgggtgatt ggctcccctg agatattacg gaagcggctg tcggtgtctg agtcgtccca 1500 cacagagagt gactcaagcc ctccaatgac agtgcgacgc cgctgctcag gcctcctgga 1560 tgcgcctcgg ttcccggagg gccctgagga ggccagcagc accctcagga ggcaaccaca 1620 ggagggtata tgggtcctga cacccccatc tggagagggg gtatctgggc ctgtcactga 1680 acactcaggg gagcagcggc caaagctgga tgaggaagct gttggccgga gcagtggttc 1740

```
cagtccaget atggagacec gaggeegtgg gacetcacag etggetgagg gagecacage
                                                                     1800
caaggccatc agtgacctgg ctgtgcgtag ggcccgccac cggctgctct ctggggactc
                                                                     1860
                                                                     1920
aacagagaag cgcactgctc gccctgtcaa caaagtgatc aagtccgcct cagccacagc
                                                                     1980
ceteteacte eteatteett eggaacacca cacetgetee eegttggeea geeceatgte
                                                                     2040
eccacattet cagtegteca acceateate eegggaetet tetecaagea gggaettett
                                                                     2100
gccagccctt ggcagcatga ggcctcccat catcatccac cgagctggca agaagtatgg
cttcaccctg cgggccattc gcgtctacat gggtgactcc gatgtctaca ccgtgcacca
                                                                     2160
tatggtgtgg cacgtggagg atggaggtcc ggccagtgag gcagggcttc gtcaaggtga
                                                                     2220
                                                                     2280
cctcatcacc catgtcaatg gggaacctgt gcatggcctg gtgcacacgg aggtggtgga
gctgatcctg aagagtggaa acaaggtggc catttcaaca actcccctgg agaacacatc
                                                                     2340
cattaaagtg gggccagctc ggaagggcag ctacaaggcc aagatggccc gaaggagcaa
                                                                     2400
gaggagccgc ggcaaggatg ggcaagaaag cagaaaaagg agctccctgt tccgcaagat
                                                                     2460
caccaagcaa gcatccctgc tccacaccag ccgcagcctt tcttccctta accgctcctt
                                                                     2520
gtcatcaggg gagagtgggc caggctctcc cacacagc cacagccttt ccccccgatc
                                                                     2580
tcccactcaa ggctaccggg tgacccccga tgctgtgcat tcagtgggag ggaattcatc
                                                                     2640
acagageage teccecaget ecagegtgee cagtteecca geeggetetg ggeacacaeg
                                                                     2700
geccagetee etecaeggte tggcaeceaa getecaaege cagtaceget etecaeggeg
                                                                     2760
                                                                     2820
caagtcagca ggcagcatcc cactgtcacc actggcccac accccttctc ccccaccccc
aacagettea ceteageggt ceceategee cetgtetgge catgtageee aggeetttee
                                                                     2880
cacaaagett cacttgtcac etcecetggg caggeaacte teaeggeeca agagtgegga
                                                                     2940
gccaccccgt tcaccactac tcaagagggt gcagtcggct gagaaactgg cagcagcact
                                                                     3000
tgccgcctct gagaagaagc tagccacttc tcgcaagcac agccttgacc tgccccactc
                                                                     3060
tgaactaaag aaggaactgc cgcccaggga agtgagccct ctggaggtag ttggagccag
                                                                     3120
gagtgtgctg tctggcaagg gggccctgcc agggaagggg gtgctgcagc ctgctccctc
                                                                     3180
acgggcccta ggcaccctcc ggcaggaccg agccgaacga cgggagtcgc tgcagaagca
                                                                     3240
agaagccatt cgtgaggtgg actcctcaga ggacgacacc gaggaagggc ctgagaacag
                                                                     3300
ccagggtgca caggagctga gcttggcacc tcacccagaa gtgagccaga gtgtggcccc
                                                                     3360
taaaggagca ggagagagtg gggaagagga teettteeeg teeagagaee etaggageet
                                                                     3420
gggcccaatg gtcccaagcc tattgacagg gatcacactg gggcctccca gaatggaaag
                                                                     3480
teccagtggt ecceacagga ggetegggag eccacaagee attgaggagg etgecagete
                                                                     3540
ctcctcagca ggccccaacc taggtcagtc tggagccaca gaccccatcc ctcctgaagg
                                                                     3600
ttgctggaag gcccagcacc tccacaccca ggcactaaca gcactttctc ccagcacttc
                                                                     3660
gggactcacc cccaccagca gttgctctcc tcccagctcc acctctggga agctgagcat
                                                                     3720
gtggtcctgg aaatccctta ttgagggccc agacagggca tccccaagca gaaaggcaac
                                                                     3780
catggcaggt gggctagcca acctccagga tttggaaaac acaactccag cccagcctaa
                                                                     3840
                                                                     3900
gaacctgtct cccagggagc aggggaagac acagccacct agtgccccca gactggccca
tecatettat gaggateeca gecagggetg getatgggag tetgagtgtg cacaagecag
                                                                     3960
tgaaagagga tccagccctg agcatcaccc aagtgcctga tgcctcaggt gacagaaggc
                                                                     4020
aggacgttcc atgccgaggc tgccccctca cccagaagtc tgagcccagc ctcaggaggg
                                                                     4080
gccaagaacc agggggccat caaaagcatc gggatttggc attggttcca gatgagcttt
                                                                     4140
taaagcaaac atagcagttg tttgccattt cttgcactca gacctgtgta atatatgctc
                                                                     4200
ctggaaacca taaaaaaaa aaaa
                                                                     4224
```

```
<210> 6138
<211> 1471
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (237)...(1287)
<223> similar to gi6017904 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6138
ggcacgaget tttttcctga gcctcagage taaaatgccc ccgagetett tectattggc
                                                                       60
tggaaagacg aattgaagtt cccttgccca tgttaggagg tgtacgcctc ctgaactaaa
                                                                      120
gatagaaaca gctggccctt ccaggcagct aaaagcctcc agactaagag gtgttcccca
                                                                      180
ttcggcagcc agactccttg aaataccctt tcagtaatca ttcaaccaac gcttccatgt
                                                                      240
ctctactctg tcgtaacaaa ggctgtgggc agcactttga ccctaatacc aaccttcctg
                                                                      300
attectgttg ccatcaccct ggggtcccaa tettecatga tgcaettaag ggttggteet
                                                                      360
gctgccgaaa gcgaactgta gatttctctg agttcttaaa catcaagggc tgtactatgg
                                                                      420
gaccacactg tgctgagaag cttcctgagg cccctcaacc tgaaggccct gctacaagca
                                                                      480
gttcacttca ggagcaaaaa cctctgaatg tgattccaaa gtcagcagag accttgcgcc
                                                                      540
gggagaggcc caagtcagag ttgcctctga agctgctgcc gctaaatata tcccaagccc
                                                                      600
tggaaatggc attggaacag aaggaattag accaggaacc tggggcagga cttgacagtc
                                                                      660
tgatccggac tggttccagc tgccagaacc caggatgtga tgctgtttac caaggccctg
                                                                      720
agagtgatgc tactccatgt acctaccacc caggagcacc ccgattccat gaggggatga
                                                                      780
agtottggag ctgttgtggc atccagaccc tggattttgg ggcattcttg gcacaaccag
                                                                      840
ggtgcagagt cggtagacat gactggggga agcagctccc agcatcttgc cgccatgatt
                                                                      900
ggcaccagac agattcctta gtagtggtga ctgtatatgg ccagattcca cttcctgcgt
                                                                      960
ttaactgggt gaaggccagt caaactgagc ttcatgtcca cattgtcttt gatggtaacc
                                                                     1020
gtgtgttcca agccaccaga tgaagctctg ggggggtcat aaaacgtgga gccagagctc
                                                                     1080
tgtcttcttg atgccatctg cgggttgaaa tctccctggt ccaaggctga cccaggatcc
                                                                     1140
tgggcccaag ctggagcacc ctgatgcact agctaagaag gctagggcag gggttgtgtt
                                                                     1200
agagatggat gaggaagaat ctgacgattc agatgatgat ctgagctgga cagaggagga
                                                                     1260
ggaagaggag gaagcaatgg gggaataagt gacaccaaga cagttgatgt ctagatagga
                                                                     1320
cctcaatgat tcccttagaa tcttagatac caggatattg ttggccatgt ggcatcattg
                                                                     1380
agcagcagga ggctgaagga ggggagaaca aaattgtcca aaccatgctg tttttttccc
                                                                     1440
ttaaataaat cttgtattct tcagtttcaa a
                                                                     1471
```

```
<210> 6139
<211> 1535
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1052)...(515)
<223> similar to gi5701565 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6139
tttttcaat tttgaagaat gtatttacca tctggttccc tatggccctc aaccattttc 60
acatgcttat ctcaagtcag attccaaagt atgcggaggg cagctgctaa tgacatattt 120
gttagtttta attttattct gcagacatta tgcagttcta taatataaaa tgaatacaat 180
actaaaatct attccttta tttacatggt gtaacatttc caataacaaa catttctaat 240
catgaaagat ggtgttaaag cagaaatatt gtcatgattg agtcaatggg agaacataaa 300
atatgctgta tttcataatt tttccgtaag aaaatgtcta gtttgtttaa atgcaacaaa 360
tactgtatta gattcactt ataagccata cactccttct tgtctttctt ttgaacacat 420
```

```
tctggaaggc agctgtgaag aacggagtag cgagtccacg ccattcaaca tccatcagaa
                                                                      480
acctgettge ttgattattt taateatett gggategatt atetteaatg ataatagtte
                                                                      540
ttctaggata agattcaatt tctacaaata tatatcgaaa atcatattca ccacttcctg
                                                                      600
ggttctcttt cacttgcgca tacaccgttc cttgcttccc tggctcagag ccctcaatgt
                                                                      660
agaatttcac acacgtgtgt ttcagcccat cttttacata ttcagtgaac ctgacatgct
                                                                      720
geoggegace eegeettgte aceteeceat ageetttaac agaeteacea aagacacega
                                                                      780
tcacctcagg atgtgatctg catttttcta aggctctccc atatatcttg ctaggactgg
                                                                      840
atgaagaaaa aagttetttg aaaategtgt aaaacaagee aeetgtaatg etgattecaa
                                                                      900
aaagcaccac tattaaatag gtaaaatctc ttccggcttc tttcactttt tgtgatgttg
                                                                      960
ggacggcggt tececetete tgacteetgt geacagaeae ttgtttgetg etateeteet
                                                                     1020
ttgcttttcg ggggctcggt ccctgcgtcc agatggtttt ctgggtgact ccaagaatac
                                                                     1080
atctaggtcg cagcgttttc ttttgatatt gaagcccaca tctcaaactg ggctcagtct
                                                                     1140
tcaagcacgc tttgttaagc acgatgtatg gcaaaagcaa tcgctttgcc gaggacctgt
                                                                     1200
gcagcttctc cgtatactgt acggctcgta gaaaagtaca aatcatgttc acggaaaatc
                                                                     1260
gttccgctta gggacgatgc taactacaat taggaaagct ttagggttca ctacacatgc
                                                                     1320
ggccggacac gtactcaagc ctatacgttt acattacatg gggtgttagg caaaaacgtc
                                                                     1380
agtttccgca gcgtaaatga aaacgaaaag tctccaggga gaacctgatg tctaccttcc
                                                                     1440
cttctgtctt ctttccattt taattaacag gctctgatca ccttctgggc tgacattcac
                                                                     1500
agtgtccccg ccatgccttc gcaaagtcac ctggg
                                                                     1535
```

```
<210> 6140
<211> 1132
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(640)
<223> similar to gi4929671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6140
cgatttcgta tggcgtacca gagcttgcgg ctggagtacc tgcagatccc accggtcagc
                                                                       60
cgcgcctaca ccactgcctg cgtcctcacc accgccgccg tgcagttgga attgatcaca
                                                                      120
ccttttcagt tgtacttcaa tcctgaatta atctttaaac actttcaaat atggagatta
                                                                      180
atcaccaact tottatttt tgggccagtt ggattcaatt ttttatttaa catgatttt
                                                                      240
ctatatcgtt actgtcgaat gctagaagaa ggctctttcc gaggtcggac agcagacttt
                                                                      300
gtatttatgt teetttttgg tggattetta atgaceettt ttggtetgtt tqtqaqetta
                                                                      360
gttttcttgg gccaggcctt tacaataatg ctcgtctatg tgtggagccg aaggaacccc
                                                                      420
tatgtccgca tgaacttctt cggccttctc aacttccagg ccccctttct gccctgggtg
                                                                      480
ctcatgggat tttccttgtt gttggggaac tcaatcattg tggacctttt gggtattgca
                                                                      540
gttggacaca tatattttt cttggaagat gtatttccca atcaacctgg tggaataaga
                                                                      600
attctgaaaa caccatctat tttgaaagct atttttgata caccagatga ggatccaaat
                                                                      660
tacaatccac tacctgagga acggccagga ggcttcgcct ggggtgaggg ccagcggctt
                                                                      720
ggaggttaaa gcagcagtgc caataatgag acccagctgg gaaggactcg gtgataccca
                                                                      780
ctgggatctt ttatcctttg ttgcaaaagt gtggacactt ttgacagctt ggcagatttt
                                                                      840
aactccagaa gcactttatg aaatggtaca ctgactaatc cagaagacat ttccaacagt
                                                                      900
ttgccagtgg ttcctcacta cactggtact gaaagtgtaa tttcttagag ccaaaaaact
                                                                      960
ggagaaacaa atateetgee acetetaaca agtacatgag taettgattt ttatggtata
                                                                     1020
aggcagagcc ttttcttcct cttcttgata gatgaggcca tggtgtaaat ggaagtttca
                                                                     1080
```

```
<210> 6141
<211> 7008
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1423)...(4713)
<223> similar to gi3043630 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6141 tttcgtgggc tggcaggcgc ctgcgccgtt gtgctccttt caggacgcgc attctcgctc 60 cetecetegg etgegegege eeggtgggeg tgggaggagg eggggaaceg gggagggtg 120 ggtgtcgcag gagggaagga gcgaaccgga gagcgtcgtc ctgagaggag tgaaggcggc 180 aaaatggcgg accgcttctc ccgcttcaac gaagaccgag actttcaggg taatcacttt 240 gatcagtatg aggaaggaca cttggaaatt gaacaagcgt cacttgacaa gcctatagaa 300 tegeceagtt tttaaageea ggataatatt ggacaceget tactecagaa acatgggtgg 360 aagctgggcc agggattggg aaaatctctt caggggagaa cagatcccat tccaatcgtt 420 gtcaagtatg atgtcatggg catgggtcgc atggaaatgg agcttgatta tgctgaagat 480 gctaccgaac ggcgccgtgt cctagaagta gaaaaagaag acacagaaga gctgagacaa 540 aagtacaagg attatgttga caaagagaag gcaattgcca aagccttgga agacctcaga 600 gccaactttt attgtgaact gtgtgataag caatatcaga aacatcagga atttgataac 660 catatcaact cctatgatca tgcacacaag cagagattaa aagatctgaa gcagagaga 720 tttgctcgaa atgtctcttc aagatcccgc aaggatgaga aaaaacagga aaaagccctt 780 eggeggetee atgagttgge agageaaaga aaacaagetg aatgtgeace tggaagtggt 840 cccatgttca aaccaaccac agtggctgta gatgaagaag gtggagaaga tgataaagat 900 gaatcagcta caaatagtgg cacaggtgcc actgcttctt gtggcctggg atctgaattc 960 tccacagata aaggaggccc tttcactgca gtacaaatca ctaataccac tggactggcc 1020 caggeteetg ggttageete ccaaggeate agetttggea ttaagaataa tetggggaee 1080 ccattgcaaa aattgggagt gtcattttct tttgccaaaa aggctcctgt caaactcgaa 1140 tcaatagcat cagttttcaa ggaccatgcg gaggaaggga cctctgaaga tggaacaaaa 1200 cccgatgaga agagttctga ccaaggactg cagaaggtag gagactctga tgggagcagt 1260 aatcttgatg gtaaaaaaga ggatgaagac cctcaggatg gagggtccct tgcctcaaca 1320 ttatccaaat taaaaaggat gaaacgagaa gaaggagctg gggctacaga gcctgagtat 1380 taccactaca tecececage acaetgeaaa gtaaaaceta atttteeett tetaettttt 1440 atgagagcca gtgaacaaat ggatggtgat aatactacac acccaaagaa tgccccagag 1500 agtaaaaaag gcagttctcc caagcctaaa agctgcatca aggcggcagc aagccaagga 1560 gcagaaaaga cagttagtga agtctctgag cagccgaagg aaaccagcat gaccgagccc 1620 tcagaaccag gaagcaaagc tgaggcaaag aaggccttag gaggggatgt aagtgatcag 1680 agtttagaaa gtcatagtca gaaggtttca gagacccaaa tgtgtgagtc caactcttct 1740 aaagaaacct ctctggccac cccagcaggg aaagaaagcc aagaaggacc caaacatcct 1800 actggteeet tetteeeagt tttgageaaa gatgaaagea etgeeeteea gtggeeatea 1860 gaactattaa ttttcaccaa ggcagaaccc tccatttcat acagttgtaa ccctttatat 1920 tttgacttta aactttcaag gaacaaagat gccagaacta aaggaacaga aaaaccaaag 1980 gatataggaa gctcctcaaa ggaccatctc caaggcctag atcctggtga gccaaataaa 2040 agcaaggaag tgggcggaga gaaaatagta cgttcctcag gaggcagaat ggacgcacct 2100 gcttcagggt ctgcctgtag cggcctgaac aagcaggagc ctgggggtag ccatgggtct 2160

```
2220
gagacagaag acacagggag aagcetteee agcaagaaag aacgatetgg gaagteecac
                                                                     2280
cggcacaaaa agaaaaagaa gcacaaaaaa tccagcaaac acaaacgtaa acacaaggct
                                                                     2340
gacacagaag agaaaagctc taaggcagag tcaggggaga aatctaagaa gcgcaagaaa
cgaaaacgaa agaagaataa gtcatcagcc ccagcagatt ctgaacgagg acccaaacca
                                                                     2400
                                                                     2460
gaaccccctg ggagtggcag tcccgcacca ccaagaagaa ggcggagagc tcaagatgac
                                                                     2520
teccagegga gatecetece agetgaagag gggageagtg geaaaaagga tgaaggtggg
                                                                     2580
ggtggtagca gctcccaaga ccatggtggg aggaaacaca aaggtgaact tccaccttca
                                                                     2640
tectgecage gaagageagg caccaaaegg ageageeggt ctagecateg gagecaaeee
                                                                     2700
agtagtggag atgaggatag tgatgatgct tcctcacacc ggctgcacca gaagtctcca
tcccagtaca gtgaggaaga agaagaggaa gattcaggca gtgagcattc ccgcagccgc
                                                                     2760
teaaggtetg geeggegeea tteetegeat egtteeteee ggegttetta eteaagtage
                                                                     2820
                                                                     2880
tcagatgcct cttcagacca gagctgctat agtagacagc gcagttactc tgatgacagc
tacagtgact acagtgacag atcacgaagg cactccaagc gctcccatga ctcagatgac
                                                                     2940
teagactatg ceageteeaa acacegatea aaaeggeaca aatatteate ttetgatgat
                                                                     3000
                                                                     3060
gactatagee teagttgeag ceagteeega ageegatete ggagteatae cagagagege
tcaagatccc ggggccgcag ccgcagcagc agttgtagtc gtagtcgaag caagcggaga
                                                                     3120
agecgtagea ceacagecea cagetggeaa eggageegga getatageeg ggaeegeage
                                                                     3180
                                                                     3240
cgcagcacca ggagcccttc ccagagatca ggctccagga agagatcatg gggtcacgag
agecetgagg agaggeatte tgggegtegg gaetteatte gttetaagat etacegetee
                                                                     3300
cagtcccccc actatttccg atcaggccgg ggagaaggtc ctgggaagaa agatgatggc
                                                                     3360
                                                                     3420
agaggagatg acagtaaagc aacaggtcca ccttcccaga acagcaacat tggcacagga
agagggtcag aaggtgactg cagtcctgaa gacaagaact ctgtcactgc caaactgcta
                                                                     3480
ctggagaaga tccagtcaag gaaagtggag aggaaaccta gtgtgagtga ggaggtgcag
                                                                     3540
gecaccecta ataaagetgg geccaagete aaggaceee cacaaggtta etttgggeee
                                                                     3600
aageteece catetettgg caataageet gteetteeae tgatagggaa geteecaget
                                                                     3660
acgcgaaagc ccaataagaa gtgtgaagag tctggcttgg aaagggggga agagcaagaa
                                                                     3720
cagtcagaga cagaagaggg gccccaggg agtagtgatg ccctatttgg gcatcagttc
                                                                     3780
                                                                     3840
cettteagag gaaacaactg geceettatt agacceacec ceagaagagt caaagtetgg
agaagttact gctgatcacc ctgtggctcc gctaggcccc ccagcacatt ttgactgcta
                                                                     3900
cettggggac ccaaccatet cccataacta ceteceegac cccagtgatg ggaacaccet
                                                                     3960
                                                                     4020
ggagtccctg gatagcagca gtcagccagg ccctgtggag tccagcttgc tgcctatagc
accagacett gageatttee ceagttatge accteecagt ggggateeta gtattgagte
                                                                     4080
aacagatggg gctgaggatg ctatcactgg ccccctgga aagccagccc atcaccttca
                                                                     4140
cccctgagga gatggagaag tacagcaagc tccagcaggc tgctcagcaa cacatccagc
                                                                     4200
agcagettet ggecaageaa gtaaaggeet ttecageete agetqeeetq qeeccaqeea
                                                                     4260
caccageeet geaacceate cacatteage agecagetae agectetgee acetecatea
                                                                     4320
                                                                     4380
caactgttca gcatgccatc ctacaacatc atgctgccgc agctgctgcc gccatcggca
ttcaccetca eccecatece caaccacttg eccaggtgca teatattece cagececate
                                                                     4440
tgacccccat ttctttgtcc cacctcactc actcaatcat ccctggccac cctgccacct
                                                                     4500
ttctcgctag ccatcccatc cacatcattc ccgcctcagc catccatcct gggcccttca
                                                                     4560
cettteacce tgteceacat getgeeetet accecacet acttgeteca eggeetgetg
                                                                     4620
cagcagetge caetgeactt caeetteace caetacttea ecceatette teaggteagg
                                                                     4680
acctgcaaca tccccccagc catggcacgt gagttggggg atgggatcct aggtagggcc
                                                                     4740
aggggaggag acccataaat gttcccttgg gggtgttgag ccattaatac cagcaagtag
                                                                     4800
aagctgggat gggcagtgtc tgacagccaa agaattgagt tttggcttgc aggggtgggt
                                                                     4860
ttagatttga agtttgcttt cagtttacta tcagggattt ctttttcctg tcctcctct
                                                                     4920
aatttgtccc tccctcttct gtgtttctaa gctagggaac accagtaagt gctacccacc
                                                                     4980
cctctgcagc aacatctcca aactqtcaag tttagataat cccctcctcc ctctqctttt
                                                                     5040
ttcctctgct cttcccttct gtaaatttta aaacattttc ctcccctctg gccagtgggt
                                                                     5100
tgtcaccaga gcacttgctg tgggcccatc tggtcttgcc ttctcagcgc cacagggaag
                                                                     5160
gccaagctgt tctagtggtg gaagtgccac cattttgggg tagtatcttt gaccatcttt
                                                                     5220
ggtgacgtta cgttatccca ggtgaggtgg aaagcgtctc acctggaacc tgatataact
                                                                     5280
caggetgeaa ttecatecag tteceacate aacggageca cacatttgge actgttatet
                                                                     5340
tggtatecet cateceagaa gaggeatete catateceag aaaagaagat eetateatga
                                                                     5400
ataaaagctg tatggcccag agaggagctc atgtgtctaa agtgaagggt atattttctt
                                                                     5460
ctgttgtgtt gatgtttcct tcttaattta taggattttt ttaatgtaaa aaattgcact
                                                                     5520
gaactctata aacgtaaatg ctgctttttg tagctcatat aaaaaaggtt ccatatttgt
                                                                     5580
```

```
5640
agtatactgc aataatattt tttacatcca gctctttaag tgatcctcgt tctggtggct
                                                                     5700
ttgtgtaaat atgtttgccc tagttgaatt aagaaactct aaaggttata aaatgaaaac
aaaaaataaa atatttgttt totgotagat goaaaactga otaagcatgt atattttaco
                                                                     5760
aaacttatgt attttttgaa gttatgaact ataaaatgtt aaaacatttt ttgctgggac
                                                                     5820
                                                                     5880
aaaatgttaa gtaatttgca gtatgtagtg cccccagtat tgggattttt gagctaatgg
                                                                     5940
gcagcagtca gctgggggct tctgagggat gctcatcttt aacagtctcc ctcatgtact
                                                                     6000
tttgctgttt tacacagaga aacaggtaga ccccacagag gagaaggagg ggattcaaca
                                                                     6060
getttattgt etggaageag tgagatttgg tgattgtetg ggggggattee tgggttteee
tgggtacett gttccaggca gtcagtccat ttgccttcct agtacttagc cccctctgac
                                                                     6120
                                                                     6180
aatttttttt ttaatgtgcc ttttgggttg gtagaaacgg aagtagaagt aggctggagg
atgagttggg acagtettee ttttgttggg aggtgageae atttacagat attttgette
                                                                     6240
atagtttcca tgccctctgc ccagctcagt ttagacagta aacgttcctt gtttcttttc
                                                                     6300
toccatgaca otgacaagag gaattaccac otcagootot titigoccoto tiotigooti
                                                                     6360
                                                                     6420
teacceagge teteageest aattaacaca etgacecaaa ggtgettgtg ttgcaggtee
catctccttt gatgaggtta acaattccca ctttggcatt ttcctaacta ttcgtgtggc
                                                                     6480
tagaattggt tggttggtca cttgacaaga aaaaccatac ttacctgggc caaggctctg
                                                                     6540
                                                                     6600
ttcctgcctt cgcaaattct caaaagagta aagtttatga aaagaaagtg gcaggcaaac
acaactettg actgeeetee caccetecta cetgtteagt acteatetga tteagaagea
                                                                     6660
                                                                     6720
tracticity gataactage actygaaaaa tgaaatcate tytytaagty aagygactea
                                                                     6780
tttttctttg ctttcagccc atgtaaataa ataatacagt attaacattt tcgtgctgct
teceattage tigtagatig agecataete tggetgeete titgeettee taggggeatt
                                                                     6840
                                                                     6900
ttctttaact tccagaatag tgattttaaa agtaaaaata aaaataaacc ttacttacaa
                                                                     6960
gcataacaga tigtatitaa ciitatcaca taigatagag atatataigc igtaaaaiga
                                                                     7008
gggaaaggaa ctttctaata aacccaatcg atttgtggaa aaaaaaaa
```

```
<210> 6142
<211> 2448
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(1743)
<223> similar to gi5852834 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6142
cgacgggagg caggagggc aggctcagga gggagttggc aggatggcag agggcaaggc
                                                                       60
aggeggegeg geeggeetet tegeeaagea ggtgeagaag aagtttagea gggeeeagga
                                                                      120
gaaggtgctg cagaaattgg ggaaagctgt agaaaccaaa gatgaacgat ttgaacaaag
                                                                      180
cgctagcaac ttctaccaac aacaggcaga aggccacaag ctgtacaagg acctgaagaa
                                                                      240
cttccttagt gcagtcaaag tgatgcatga aagttcaaaa agagtgtcag aaaccctgca
                                                                      300
ggagatetae ageagegagt gggaeggtea tgaggagetg aaggeeateg tatggaataa
                                                                      360
tgatctcctt tgggaagact acgaggagaa actggctgac caggctgtaa ggaccatgga
                                                                      420
                                                                      480
aatctatgtt gcccagttca gtgaaattaa ggagagaatt gccaagcggg gtcggaaact
cgtggactat gacagtgccc gacaccacct ggaggcagtg cagaatgcca agaagaaaqa
                                                                      540
tgaggccaag actgccaagg cagaggaaga gttcaacaaa gcccagactg tgtttgaaga
                                                                      600
tetgaaceaa gaactaetag aggagetgee tattetttat aatagtegta ttggetgeta
                                                                      660
                                                                      720
tgtgaccatc ttccaaaaca tttccaactt gagggatgtc ttctacaggg aaatgagcaa
gctgaaccac aatctctacg aggtgatgag caaactggag aagcaacatt ccaataaagt
                                                                      780
```

```
840
ctttgtggtq aagggactgt caagcagcag caggcgctct ttagtcattt ctcccccagt
togaacaget acagtotoca gtootottac otcacotact agtocotota cactttoctt
                                                                     900
gaagagtgag agtgaatctg tctcagcaac tgaagatctg gcacctgatg cagcccaagg
                                                                     960
                                                                     1020
ggaagacaat tetgagatea aggagetett agaagaggag gaaatagaga aggaaggate
tgaagcaagc teetetgagg aagatgagee tetaceagee tgeaatggee eegeecagge
                                                                     1080
ccagccctct cctaccactg aaagggccaa gttcccagga ggaagttctc cccagctcca
                                                                     1140
                                                                     1200
caactccatc accaggegga geettgagee ettcagggca geettcatca tetgecacag
aaqtagteet eegaaceege acegeaagtg aaggatetga acaaceaaag aagagageet
                                                                     1260
ctatccagag gacctcagca ccccctagta ggcctcctcc acccagagcc actgcaagcc
                                                                     1320
                                                                     1380
ccaggeete etcagggaac atacetteca geeetacage etctggaggg ggtteaceca
ccagccctag ggcctccttg gggactggga ctgcaagtcc taggacctcc ctagaggtct
                                                                     1440
                                                                     1500
ctcctaatcc agaaccacca gagaagccag taagaactcc tgaggccaaa gaaaatgaaa
                                                                     1560
acatccacaa tcagaaccct gaagaacttt gtacttcccc caccttaatg acatctcagg
ttgcttcaga gcctggagag gcaaagaaga tggaagacaa ggaaaaggat aataagctta
                                                                     1620
teteagetga eteeteggag ggeeaagace agetteaagt eteeatggta eeagaaaaca
                                                                     1680
                                                                     1740
acaacctcac agcacctgaa cctcaagaag aggtatccac aagtgaaaat ccacaactct
gaagagaaac taccaagact cctcctgccc caaacctcgc cagagaagct cttcaaccag
                                                                     1800
agggtatagg tcagagggat ataagagcca gcatccatcc ctgggttctc agtaggaatg
                                                                     1860
                                                                     1920
ctggtgctgt ctaaagacct ggcattaatg gaggcggagg agcagcctta cgggagggat
                                                                     1980
ggagggaggc aggctgggga gaagagaaca ttagactcag ggaatattta attctggttt
                                                                     2040
tagcattatt agaataagac tttatacatt aactaaagtg gagctttaat cactataaaa
                                                                     2100
agcaaaagta totatagaca cagacacttg cotatacaga gacataacca cacactca
gaggatagtg aacaaatctg tctttgactt acgacccatt ttgcaagact taaagccgaa
                                                                     2160
                                                                     2220
agaacacatt ttcagattgt taaataaagt ctgattctga aaaaaaaaa aagggggggc
                                                                     2280
cgttttaaag gatccctggg ggggcccaag tttacgcggg catgcgaagg taatagtttt
ttccttatag gggggcgtat tataacctac ctgggaattt ttggaaagga cccttacttt
                                                                     2340
ggggggggga catattggga caacctccct acagaaattt aaggctctag ggaaaatata
                                                                     2400
aaattttaaa gggtataagg gggaaaacta gcggcatagg ctggcggt
                                                                     2448
```

```
<210> 6143
<211> 2495
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2121)...(106)
<223> similar to gi6002955 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6143
60
agtagagtca agtatttttt caaagttcat atacaggcac agtctcagtg aactggcgtc
                                                              120
agggcctcgt acagtctctg tgcagccagc tccaccattt ctcggaggga ttcatcgtct
                                                               180
teactteect etteacatte tacagteegt gtetecaagt taaggttgge agtttteecq
                                                               240
tecaetgtga egetaagaat agagteatee tttacaetta cacagtette tecaaatatg
                                                               300
tectggagea tgatetecaa cetettgetg taaaegtgea tttetaattt tttagaaaee
                                                               360
ttctgtactg caccttttct tattttggga tttgactgaa cttccaatat cacagttgtt
                                                               420
actgtatctg catacatatc attagaaggg tttgccagcc attctaatac caccatgcct
                                                               480
ggttcttgta ttacagtaat atttttgaac actttcagag caggtttttc ttgaatttct
                                                               540
```

```
aattetteea cateacetgt caatttetge agetggtaac agageaaatt aaagggacea
                                                                      600
gtatatggaa tggcttgggt ctgcttcacc gtgctcatgg ccaggtcagt ataattggac
                                                                      660
aggtcgcaag gagaaagtat gtgataatta aagtttcttt taacaagtat tcctgagacc
                                                                      720
cgctggcctt gttctggttt tttgtctgct aaaaatccca taaccttggc tagtttttct
                                                                      780
cctctgaagt ttaaggtcac tgcttctgta ttccgaggat tatgaacctc tatgtgaact
                                                                      840
                                                                      900
tcatcgttat cttcatattc tcgaatcagt gctgctttca atctggccat ttcattctgt
tctccatgga ctaaaatcac atgaggcggt ttcaaagcac gaataaattc actggtttgc
                                                                      960
tggtaatccg tgtgagctga gaaagaaatg taatcaacag acattttcag tggtaacttc
                                                                     1020
tgtccagaca tagtagtgat ttcttcaggt tcagacatga tgtgcttggc aagtgtccct
                                                                     1080
tctacacagt atcccgctat aatgacacca ttcctcttat cagtacacca gctttcaaat
                                                                     1140
aattetetgg ataageeact ttgeateatg cetggggagg ceattacaae actgggaeea
                                                                     1200
atgtcatcaa aatgatccat gctcttgagg ttactaatgt gtttgaaaac aaagggatta
                                                                     1260
ttgatgttga tctgtttgcg gattttgtca ttcatggcat ttacatatgt ctggtacact
                                                                     1320
gccatacact tettggccaa agatgatgca tagtatattg gaatgtcatg tagttetggg
                                                                     1380
tgattctgcc agtactcatc tagaatcaag agcagctcct gagcccttcc aagagcaaag
                                                                     1440
acaggaatga gacccctgcc tcctctgttt acaatatcgt ggacagtgtt acagaatctt
                                                                     1500
getteteget etteaegttt eteatggata tgggteecat aagtagatte aatgataaga
                                                                     1560
atatcagget taatattagg aattteaget gecattaagt geetatette ttgtettgag
                                                                     1620
aaatcaccag tgtacaaaag cttcacgcct gcgatctcaa tcatgaacat ggcggctcct
                                                                     1680
aggacgtgac ctgcatggta acaccaaaac ttgattcccg caacttcctt aacttcatga
                                                                     1740
aagttgatag tttcaatttt gtccatgctt tcttccaaat ctgtcctcgg tataccagca
                                                                     1800
tgtcgtctgc tgatatgtta ctaactttga cataatcaga aagaagccat ctataaatag
                                                                     1860
cttttgtggc atgagtcata aatgttcttc ctttgaaact tgtcttctgt agaaaccagg
                                                                     1920
gcagagctcc acaggtgatc caaatggaaa tgactaatta ataggagatc aatctcagct
                                                                     1980
gggtcaatta aatcaatata aggaagagca tccattcctt ctaggccagg gtggatccca
                                                                     2040
cagtcgagca ttatttttct tcctttgaac tcgagaataa tacatgatct tcctacttct
                                                                     2100
tgcccagctc cacctcccct gaaactgatg aaaaagcaaa atcccgttca ctctatagca
                                                                     2160
ggccccttcc gatcaacggt cctccaaccc ctcgagcctg agaagcctgg cccgcaagcg
                                                                     2220
cggaccaaag gcaggctgcc ggggtaggtg ggagcgcggg cgacggagga ggccagtctc
                                                                     2280
eggttacece tegegeecet cacageeegt ggetteatte eetetetege tggteeetta
                                                                     2340
caggggtcgg atcagcagct ggtcgctctc ctcagcagga atcgcagaca tcccgaaagt
                                                                     2400
gtgagggcga agcgggggtg aggaacaggt cgccggggtc ttcctaaatt ggaagcacag
                                                                     2460
ccaccggtaa ataaaaaagg aagaacccca cgaaa
                                                                     2495
```

```
<210> 6144
<211> 3499
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3140)...(1083)
<223> similar to gi4583652 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6144

tttttttt ttacagtctt tgttgtaagt gtgttattgg tagaaacaga tgcttgcaat 60
gcatactttg tgtttatata aactgctaca tttcttctta aaggttttcg ttttgtttc 120
actggagatt tttagcctcc aagtgaactt aacatattgc ctatgcatct ggattctta 180
tagactttta gattttaaaa ctaaatttga gaaaccatgc atactgtata ccttatttaa 240
```

```
300
taatccaaag aattgtttgc actttcaaaa aagttacata aaggctgtgc acaagttaaa
                                                                      360
taaccetata tggatgtaaa ttttcccatt tetgaataet ttttcagtat tatatattge
                                                                      420
ttgctgtcta ataagttaga ttgtcagaga cgcttcagta aattatctct actttaaaat
                                                                      480
tatatctgaa tcccctttct ctgagatgaa cttgccaata ttaaacattg tgccatatgg
                                                                      540
cagtattage ccaaaagett aaataagaac caaacttgta gactgaatat tttaacetta
                                                                      600
aaattatata cctatatata cacctatggt atgctgcata ttaaatttaa catttcaagt
                                                                      660
aacatatata tagcaaacat tcagccaaat actctttcat gaaaagatac tgtccttaaa
ataaaaagtt aatgaaaagc ttatttagac acaaatgtct agatataagt actaagccta
                                                                      720
tgaaacttga agctaaagtc tgctgtacta ttaagaaaaa gaagattgat tcttaaccta
                                                                      780
ctgaattgtg cagatacaaa agtgcttagc atgacaaaat taccaaaata aaaacatttt
                                                                      840
                                                                      900
agaggttatt tggttctagc aatattaact attctgtatt tctggataat ttaacatttg
                                                                      960
tattttaaat tttatataaa tttcttttta acaagtttaa aaaagcacac gaaaaatagt
                                                                     1020
tcaaactata tataatctgt tatttttcat cctggttagc taatcacaaa taactcagca
aaacaatgct tgaacattca gttctactaa aaaacagtat ttgagtagat cccatcacct
                                                                     1080
tacccattgt ttgctatgtt agaccctaaa acaggctgcc gacagatcgg acaagtgcaa
                                                                     1140
ttctctgaga gccatcggtc aatacaatga atgtgaaatt catgcatgca aggtaattgc
                                                                     1200
                                                                     1260
ctgagcttgt ttccagttac atagtcacta atacaaacac tacagatttt acctagttca
ctatcaatac tgttatgctc atagtgcctg gtggaaagat tgtcaatctg ctctttggtt
                                                                     1320
aaaccacgta ttcgatcatc atcatcactt tcatttagta aaaaaaagtg agcaaggcga
                                                                     1380
                                                                     1440
agaatgggta gtgttccagt ttcaactaaa ttgtttggat ttcgcaactg cctgccaccc
ctactgtcac tgtttcgagt atgaggctgg gtggtctcgt tttcaccatg catttcagtg
                                                                     1500
etgteteett gggeetgeet gtettgagag gaacetteee tgtgetgget eetgttgtta
                                                                     1560
tetgtaceta agttacteag ttetgagtge atgtetggta aatgetggee atttetttga
                                                                     1620
agttetgaet cagaategge etecattaga gaacteagtt etecaaaeee agteatgate
                                                                     1680
tgccttaaaa ttgaccgaag agccactgat gatggctcaa caagctcatt ctcagaaatc
                                                                     1740
                                                                     1800
ctacgaagag gaactgttat ggtactaaca taggttcgaa tacctgaccg ctctaaacga
gaaatggttc ggcgaaagcc cccactattg ctttcaatag tgactgtatt ttctgctagc
                                                                     1860
cetactetgg ategagttet atttgcaata ctatecegat etetatttte tecaggaegg
                                                                     1920
                                                                     1980
atcettecte acttgaaggt ccagtgtgat tgttggatgt cgtcgtacag cagttgagga
                                                                     2040
tetgetggat tetteteett ettetaetgt tattettgae acaageettg aattagagaa
tggggtatat gcagtacctc tgcgttctcg ttctctatct tgctctaaaa agactcgagt
                                                                     2100
tetacetete etectaacag atettetagt ggtttgetgt aetggtetae tttecetttg
                                                                     2160
ggaattatga taaacagtgc cactctgtct ctgaattggt gaacggcttc gactattgga
                                                                     2220
agtagategt aatettattg getetaatet ttggtttgta tteeteactg taacattaet
                                                                     2280
tetageecca tttteecaaa catgtgetge tecaaacegt tgeeceteec tttgeetgag
                                                                     2340
ttcactacca cctgattggt ttgtgtgact actgaaatta gtgcgtgaag cgttagctcg
                                                                     2400
aggaatgcca gctgctcccc caattccatt tcttaacctt cccaatgttg agaaaqatcc
                                                                     2460
ttcagctgga ttttgccccc ttgaagcaag cctagtcctt ggaatgttgg aactactacc
                                                                     2520
attgaaattc actgaggttt ggcttcttgt tcgcctagcc acaggactaa gttgaccttt
                                                                     2580
gttgcctatt tgcagtatga tctctgttac tatctgaaag tggaatgtct gtataatctt
                                                                     2640
ctccatgaat ttcaaatcct ctattttcat gatttacgtg gatttccaaa ctaaaccgaa
                                                                     2700
actetecatt gttegggttt gttegaetea eageteteea agtttggtte eeattttgte
                                                                     2760
cacttegagt tgcatttect gtgcgccgaa aggtgttcaa ccattetaga agagaatett
                                                                     2820
catgtgaact ttctctaggg acttctgagt ctctgtaatt cgttccatct ctcaagtcag
                                                                     2880
gctgagatgc tagttgttcc ttgacgccat ctaaccgctg ttgcagttct tctgatgtta
                                                                     2940
tttctccagg ggtgcctaaa agattatggt ctctcataag ccgataatct tcatcattga
                                                                     3000
gttcattaat aaactgataa taggcctctt ctctgtggag acgctcttgc tgccatcttc
                                                                     3060
teteatttte atgatgatta tggtettgag gtaaggttte tteaetgeea ceatetgate
                                                                     3120
tegatetaga etgatteate etgagattee tggetttett atttteettt caacaegett
                                                                     3180
ttaacatatg ccatggtatc catcettcaa ttgtttgtgc cttttttgag agetgaccat
                                                                     3240
ctctccaggt cttgggcctt cgccctcctg tccggagaac gtgtgctgtg ggcggccgtt
                                                                     3300
ctctcgggtg ctggaggctg tggttgggag gcgggatagg cttgccgccg cgcctccgga
                                                                     3360
gcccgctgtg ccctcgaatt ggccactgag gagagaagcc ggaagcccgt gctgcagcgt
                                                                     3420
ggggtcgtcc agctggaggg gatactcggg aggaagaacg gcaggcccca gcccttcttt
                                                                     3480
cccgacagcc acgacgccc
                                                                     3499
```

```
<210> 6145
<211> 4286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (623)...(2150)
<223> similar to gi4240187 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6145 gtcctttttc ccgggtccac ccacgcgtcc gcccacgcgt tcgggaaaat aaagcttttt 60 atattttgtt ggtgtggaca tggataaccc tattggcaac tgggatggaa gatttgatgg 120 agtgcagett tgtagttttg egtgtgttga aagtacaatt etattgcaca teaatgatat 180 catcccagag agtgtgacgc aggaaaggag gcctcccaaa cttgccttta tgtcaagagg 240 tgttggggac aaaggttcat ccagtcataa taaaccaaag gctacaggat ctacctcaga 300 ccctggaaat agaaacagat ctgaattatt ttatacctta aatgggtctt ctgttgactc 360 acaaccacaa tccaaatcaa aaaatacatg gtacattgat gaagttgcag aagaccctgc 420 aaaatctctt acagagatat ctacagactt tgaccgttct tcaccaccac tccagcctcc 480 teetgtgaae teactgaeea eegagaaeag atteeaetet ttaeeattea gteteaeeaa 540 gatgcccaat accaatggaa gtattggcca cagtccactt tctctgtcag cccagtctgt 600 aatggaagag ctaaacactg cacccgtcca agagagtcca cccttggcca tqcctcctgg 660 gaactcacat ggtctagaag tgggctcatt ggctgaagtt aaggagaacc ctcctttcta 720 780 actggaagat gagtgtgcag gctggtacgg atggaacett caagaaggca ctcggtattt 840 cacctgtgcc ctgaagaagg cgctgtttgt gaaactgaag agctgcaggc ctgactctag 900 gtttgcatca ttgcagccgg tttccaatca gattgagcgc tgtaactctt tagccatttg 960 ggaggcttac ttaagtgaag tagtggagga aaatactccc acccaaaaat gggaaaaaga 1020 aggettggag ataatgattg gggaagaaga aaggeateea gggteattae aattettgtt 1080 acttagacte aacettatte tgettatttg ettttagtte tgttetggae aetgtgttae 1140 ttagacccaa agaaaagaac gatgtagaat attatagtga aacccaagag ctactgagga 1200 cagaaattgt taatcctctg agaatatatg gatatgtgtg tgccacaaaa attatgaaac 1260 tgaggaaaat acttgaaaag gtggaggctg catcaggatt tacctctgaa gaaaaagatc 1320 ctgaggaatt cttgaatatt ctgtttcatc atattttaag ggtagaacct ttgctaaaaa 1380 taagatcagc aggtcaaaag gtacaagatt gttacttcta tcaaattttt atggaaaaaa 1440 atgagaaagt tggcgttccc acaattcagc agttgttaga atggtctttt atcaacagta 1500 acctgaaatt tgcagaggca ccatcatgtc tgattattca gatgcctcga tttggaaaag 1560 actttaaact atttaaaaaa atttttcctt ctctggaatt aaatataaca gatttacttg 1620 aagacactcc cagacagtgc cggatatgtg gagggcttgc aatgtatgag tgtagagaat 1680 gctacgacga tccggacatc tcagctggaa aaatcaagca gttttgtaaa acctgcaaca 1740 ctcaagtcca ccttcatccg aagaggctga atcataaata taacccagtg tcacttccca 1800 aagacttacc cgactgggac tggagacacg gctgcatccc ttgccagaat atggagttat 1860 ttgctgttct ctgcatagaa acaagccact atgttgcttt tgtgaagtat gggaaggacg 1920 attctgcctg gctcttcttt gacagcatgg ccgatcggga tggtggtcag aatggcttca 1980 acatteetea agteaceeca tgeecagaag taggagagta ettgaagatg tetetggaag 2040 acctgcattc cttggactcc aggagaatcc aaggctgtgc acgaagactg ctttgtgatg 2100 ccatatatgt gccatgtacc cagagtccaa caatgagttt gtacaaataa ctggggtcca 2160 ttcgggaaaa ggcaaagaaa ctgaaggcca gaagtcccta acgttgcatc ttattcggag 2220 ctggcagttc ctgttccacg tcccattgcc cggcaatgga tgtctttgtg gtgatgattc 2280 ttcagaaaag gatgcctctg tttaaaaaca aattgctttt gtgtccctga agtatttaat 2340

```
aagaagcatt ttgcactcta gaaagtatgt ttgtgttggt tttttaagaa gtctaaatga
                                                                     2400
agttattaat acctgaagct ttaagttaag tgcattgatc atatgatatt tttggaagca
                                                                     2460
                                                                    2520
tacaatttta attgtggaag tttaaagcct cttttagtcc attgagaatg taaataaatg
                                                                     2580
tgtcttcttt atggaccaag gatatgaaat catttttctt ttgtagctaa cggttgcctt
                                                                     2640
gaggaagaaa taatttggtt ttattaagag tctactctca atccagttat tagagatgta
                                                                     2700
ctgagtttga tttgttaatc ctttctatat actgctgatc ttgcatgtct acaatctgct
                                                                     2760
cagtttttct gtgtttctgc aatagtggtc agaaaaatac ttaaattccc ttaatggtgt
                                                                     2820
tgttttctat ttgttctggt tttgagataa atgagtgatt ctgtccccaa atgtccattt
                                                                     2880
ttgaagtgat tttcctggag gattagggta tttagcagtt gaagctcttc attcatagta
                                                                     2940
gttactgtca gctaacaggt tttttaaggc ttttaactat taatatttta tggaatgggg
                                                                     3000
caaagtaaat tgatgaaaga attggagtga taatagtcct ttacaaacat acagtccata
                                                                     3060
agaaaatgaa tttggcatat agaattatta caatttcctg ggagagatgg atatttaaac
                                                                     3120
ctctattatt ttagacaaga ctgtctagaa cttaagtttg atctgtcagc cagtactccc
attaaattca gtgtagtttc acttgataga atcagatatg ttatcgaaat gttagcagca
                                                                     3180
getteateet eettetgatt aaagtaagta gaaatgggat gttttgttta ataacageea
                                                                     3240
                                                                     3300
tagtgtgtgt ttagaccaca gcggatgttg tagaccagga ccatagatga tacatgtcag
                                                                     3360
tgctgtggaa tgtgcattct ctgagtgttg ttttgtggta tcattgtctt tcctgaatga
ctttctaact gtgcagaaag gcagaaaagt catcatatgt atatgtcata tgactttata
                                                                     3420
aaatatttaa tgtgacaaaa agtggaaaga atctttacaa accctgcaat tacttttta
                                                                     3480
aaggcacttt tactctttgg ttttatcatt ccattttgct aatatttact agctttataa
                                                                     3540
                                                                     3600
attacagtaa ggtacaaaaa ctcatcttgt aatattttca tttttgaagt gaaaaagtac
                                                                     3660
atatattttg cacaaggttt tatactgcta agtgcttggt tggggtggtg agatgatgat
                                                                     3720
tagatcaggg gtgaggctga gagactctgg gtttagggcc tagccccgcc ccccatctcc
                                                                     3780
cctggggtaa aaatggaagg gtgtgggggt aaaaagatgc cataaggccc ttttctagct
                                                                     3840
ctgacagcct agaagtccaa tcaccctgta ataaatatgt gttgaatgaa gaaatgggtg
aatgagettg teaatgtgat tttaaaaaat tgactacetg gaggaatgat taggaateta
                                                                     3900
aatgaagcca gccctcggta tctgcaggtt tctcatccat ggattcaacc aactgcaaat
                                                                     3960
ggaaaatacg attttttta aaaaaaggat ggttacatcc gtattgaaca tgtacagact
                                                                     4020
tttttcttgt cattattctc tgaacaatac aagaactctt tatgtagcat ttacatttat
                                                                     4080
taggtattat aagtaatcta gagattattt aattaaaata tacaggagga tgtgtgtcag
                                                                     4140
ttatatgcaa attctgtacc attttgtatc agggaattga gcatcttcag atgttggtat
                                                                     4200
ctgcagggat cctggaacca aacccctgca gatactaagg gctgacgatc taggtaagac
                                                                     4260
                                                                     4286
tggatttaac agttggaaaa aaaaaa
```

```
<210> 6146
<211> 3912
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (449)...(1762)
<223> similar to gi434777 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6146

tgcaggaccg gccggaattc cggtcgacga tttcgggccc acagctaagc cgagtgcgtg 60
aatgcttatg tgaccgtgtg aaggaggttc ccaccgtgtg gctgtggggg atggaaaaag 120
gctacttgga aagatgtaga agaccttcga gtaaacagtt acgtttcaga aacagagcct 180
gctcagaatg tgtacttggt gggattctat tcttagggac gcttctttct tctgagagac 240
```

```
ccgagctctg tggcgagtgg cacaggcagg gccccttcct ttcctagttg ggttctgaca
                                                                      300
gctccgaggc agtggtttac acaaccaaca cgaaacattt ctacgatcca cccgattcct
                                                                      360
cccctcattg atattcagga agcagetete etteccetge etteagetea agtttgetga
                                                                      420
                                                                      480
gettttgttt catttgtgaa tacttettge tggaagteee teacceagag accagtgete
ccaacggcag agcagcgggg gagataaaga actggtgaca cgtggctgta cattcagcac
                                                                      540
                                                                      600
agctgtggtg tccccaagtg ccatgaccca ggagccattc agagaggagc tggcctatga
                                                                      660
ccggatgccc acgctggagc ggggccggca agaccccgcc agctatgccc cagacgcgaa
                                                                      720
geogagegae etgeagetgt egaagagaet geeeceetge tteagecaea agaegtgggt
                                                                      780
cttctctgtg ctgatgggga gctgcctcct ggtgacctcg gggttttcgc tgtacctggg
                                                                      840
qaacqtqttc ccggctgaga tggattactt gcgctgtgct gcaggctctt gcatcccctc
                                                                      900
qqcaattqtq aqcttcaccg tctccaggag gaacgccaat gtgattccca actttcagat
attgtttgtt tccacgtttg ctgtgaccac tacgtgttta atttggtttg gatgcaaact
                                                                      960
agtectgaac ccatcagcaa taaacatcaa etteaacete atectgetge teetgetgga
                                                                     1020
getgetcatg geggecacgg tgateatege tgeacggtee agegaggagg actgeaagaa
                                                                     1080
aaagaagggc tccatgtctg acagcgccaa cattctggac gaagtgccat ttcctgctcg
                                                                     1140
                                                                     1200
ggtcctgaaa tcttactcag tcgtcgaggt aatcgcaggc atctctgccg tcctcggggg
gatcattgcc ctgaacgtgg atgactcagt ttcaggccca cacctctcag tgacgttctt
                                                                     1260
                                                                     1320
ttggatecta gtggeetget ttecaagtge cattgecagt catgtggeag cagagtgtee
                                                                     1380
caacaagtgt ctggtggagg tcctgattgc cataagcagc ctcacgtctc cgctgctgtt
                                                                     1440
cacagcetet ggatatetgt catteageat catgagaate gtggagatgt ttaaggatta
                                                                     1500
cccgccagcc ataaaaccat cctacgatgt gctgctgctg ctgctgctgc tagtgctcct
                                                                     1560
gctgcaggcc ggcctcaaca cgggcaccgc catccagtgc gtgcgcttca aggtcagtgc
                                                                     1620
aaqqctqcaq ggtgcatcct gggacaccca gaacggcccg caggagcgcc tggctgggga
                                                                     1680
ggtggccagg agcccctga aggagttcga caaggagaaa gcctggagag ccgtcgtggt
                                                                     1740
gcaaatggcc cagtgacccc cagacgcgga aaccgggtgg cagcgcccag cctggcccca
                                                                     1800
ggcatggaaa cgcacaaccc ctaatcgccc tgagctactg cttctaacac ctcttttccc
ttgtgttaag ggaaaccagg ctgcaggtgg ggttttcact tcctagggta gtttaatttt
                                                                     1860
                                                                     1920
aaaataqgcc aatgttggct agtctgtgcc tcagtgagat cagtcagctc cgagtggctc
                                                                     1980
ccgtgtcgta acagcaggag catggccgca acttcccagg ccgaggaagg gcccccggct
eggeetettg agageeceae ecetgaactg geeceagete etetteetge eteteteatg
                                                                     2040
gettgggetg gagtgggete tetggacetg accagaetgt gggteeetge gteteetgee
                                                                     2100
cactetgace gggetteete ectecaeget tagggtetgt ceegggtact cagteagece
                                                                     2160
                                                                     2220
agtgggatet tacccaette cetgeaaggt geacetgeee caggeteagg etgeecageg
                                                                     2280
getetteetg gacagtgaga geagggettg gegeetetgt cetggeeegg gageegeagg
                                                                     2340
ggcccctcct ccagagcctg ggcgcaagcg acacaggctg ccgctgctct cccaggtgaa
                                                                     2400
atccacacca gtccacgccg ggtcgcctgc cctgtctccc tacttagacc cagtcattct
                                                                     2460
agagggatee acegecacae tggeeggeee aegteetggg tgetgteatg eecagettgg
                                                                     2520
agtgccacgt ggccgctgcc cacgtcccgg gcactgtcat gcccagcttg ggagtggcca
                                                                     2580
catggteget geceaegtee egggeaetgt catgaceage ttggagtgee acegtggeeg
                                                                     2640
ctgctgtgac agacagtatt ctcgggggtg ggggctgcat ccaaggcttt gtcaaccggc
                                                                     2700
tqqaccacqt ctccctcgcc ccagtqaccg ggggaggctg agcccctccc tcctgtgttt
gttcccatta ctcaaaatgt aggatagatc aggtcagagc ccaggaaata ctcacaggtt
                                                                     2760
cacccaggeg ccctcttacc tcctaggcaa gtactttgtc tttgatcctc aattgagaag
                                                                     2820
                                                                     2880
ggcccagggg aggggtcttc tccatcttcg cttgttttgg gggtcttagg gtacagccca
                                                                     2940
ggcggtcact gcccacctgc caggctgcag ggacagttgg gtgtgagaat aacactggct
ttgggtagtg ccatggccag gagtgggttt ccctgcgtct cctcgtcccg agggcgcctg
                                                                     3000
                                                                     3060
ggtcctccca gctgacggca gtaaatccac agtgagttgg ggcgactgtg aaactggaat
                                                                     3120
getgttaett tgataattae ttteeageag gtgtttteet teacaatggt tttgtttett
tecttetgat etgagaagae atgaaegttt tetetteace geegtggggt gtattgaetg
                                                                     3180
                                                                     3240
gtcccccatg ggctgctgga aaggcccgga gatgcatctg tggcctgggg ccatcaagat
caaagaacca ggaggcctgg gagatgcagc tggatggggc ggcctgcaga ccctgccagg
                                                                     3300
                                                                     3360
gggtttgagg acceteceag gttteecaet tegggaacag gagtgaetet ggetgeeaag
                                                                     3420
ataccttcat ggtgttcatg acaagtggaa tcattatttt caaccattga agggggatgc
aggcaagaca cetteccage tgetectaga ggggacaage caggeeetet etgcagteet
                                                                     3480
eggeagetee ggaaggacae agteagggge egggeaaaca etttggeeae ageeceaaae
                                                                     3540
                                                                     3600
aagcaccacc gtgggagagg agaggetget gtcactggta ceggatgeag accecaccet
gtotgcaggo caccoccaco tocotgcago ttttgaggotg goggggtotg ctcctgggaa
                                                                     3660
```

```
tggggtggga gccacaggga cgacccgggg cgggctgatg tcttcttggg ggcagaccca 3720 gagagctcaa gtttcagagt cagaattagg cacttggagc gtttttgctg gcttgcactt 3780 tcttattttc ttattttaga gcgcttaaaa aatccggaaa aatggggttt aaaagaactg 3840 tctctttcag tctacatttt tgtttaatac gcttgagcaa taaacgctga cttgcagacg 3900 tgaaaaaaaa aa 3912
```

```
<210> 6147
<211> 3071
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2884)...(502)
<223> similar to gi36065 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6147 60 tttttcactt agaaatgttt atctttattt cggaataacc tataggacca tatccagata 120 aaggteetat cagtacttet catgagttat cactcagttt tgcatetaga ggacccacca 180 gtcaaagcag taaaactaaa tctccttata caatactgaa gtcttcagaa aagcagtgct 240 aaatgggtga tgaaacctga cttaaccact tccctgtatg gcaagatgac ttattttgca ttcctaaaac ttctactttg attctcaata tatccgtttt tttttcttt ttttcaaaag 300 cattattttg gtgaaaatcc caatatatga gtttaaaaaa aaatcattaa catcattaac 360 420 agtactttaa atcaattact cettttgeet geaacagggt ceageaaage ettaceacet caagcaaacc cactatacct atctatgctc aagaagtagt ttggctactg aagacatgct 480 ggtctcttcc aagtctttcc tcaggatcca cacatcagac attcatctct attctccaaa 540 gagcacacca tggctgctgt gttcctctcc ttctcttctt cctcttttga taccttttct 600 ttatetttta getteteett atttagagtg aactggattg gattagetge tggtetegte 660 720 cttaaataat acatcccagt cttcaaaccc tgcttccagc cgtagaagtg catactagtg 780 agtttgccat agttaggctc agcaatgtgg atgttcaaag attggctttg atcaatgaaa 840 gcacctctct cagctgccat cttgagaaca gttttctgag agatttccca cacagtttta taaagttgct tcaggtcatc aggaatttct ggtatgctct gaatagagcc attgcatgca 900 960 ataatctggt ttttcatctc ttcatgccat aggccccgct cggtaagatc tttcaataag tgaggattta caatctgaaa ttctcctgac aagactctgc gagtatagat gttgctggtg 1020 taaggttcaa tggactcatt attccccagg atctgagcag tggaagctgt aggcatcggg 1080 ggcaataagt aaactgtttc ttataccata ctttgcaatc ttctccttga gaaccttcca 1140 gtcccatagg tctgtaggag taacattcca catatcatac tgaagaattc ctttgctaac 1200 tggagagece teataggttt egtatgggee etgeteettg geaaggteae agetggette 1260 cagagcacca taataaatag tttcaaagat ctgcttattc agtaactggg cttctgcact 1320 ctcaaaaggg tatctcatca ggataaaagc atctgccaga ccttgtaccc caattccaat 1380 ggggcgatgg cgtttatttg ataggcatgc ctctggtaca ggatagtagt ttatatcaat 1440 aattttattc aagtttcgga caacgacttt agtgacttca gccaacttct taaagtcgta 1500 tgtgtgttct gatgtgacat acatattcag ggccagggaa gccaaattac aaacagcaac 1560 cteatetttg ctggtgtact ccactatttc tgtgcacagg ttgctgcatt tgatggttcc 1620 caggitetge tggttgetet ttegattaca ggaatettig tagageatat aeggggtgee 1680 tgtttccgtc tgagactcaa tgatggcata ccaaagctgc tgagctttta caactttgcg 1740 gacacgacct tgtttctcat aacttgcata tagtttctca aattcctctc cccaaacctc 1800 atccagacca ggacactcat ttggacacat caaagaccag tcctgattag tctccactcg 1860 1920

```
cctttcctgt gttcttcttt aaatcaagga attcaaagat gtctaaatgc caaggctcca
                                                                    1980
                                                                    2040
qqtaaataqc aaatgcccca ggacgcttgt tcccaccttg atccacatat ctagctgtgt
                                                                     2100
tqttatatac tctcagcatc ggtacaaggc cattggaatt gccattagtc ccagcaatgt
agetgecagt agecegaata caacteacag caacaceaat teetecagea gaettagaaa
                                                                    2160
                                                                    2220
tcaatgcaca ttgctttaga gtgtcataaa tgccttcaat gctgtcatct ttcatactca
                                                                     2280
qaagaaaaca gctagaaagt tgtgggcggt tggtaccagc attgaagaga gtgggcgaag
                                                                     2340
catgagtaaa ccacctctca gaaagaagat tatatgtttc aattgctgca tcaatgtctt
                                                                     2400
ctttgtggat cccaacagat actctcatca acatatgttg tggtctttca gccacttttc
                                                                     2460
cattgatctt caacaaataa gaccgctcta gcgtcttaaa gccgaagtaa ttgtaagaga
                                                                     2520
aatctcggtc atagataata gcagaattca ggcgatcttt attggccaga acaatatcca
                                                                     2580
atqttqactt ggccaccatg ggagagtgtt tgccattatg tggatttatg tagttataga
                                                                     2640
ggtcttccat cacatcactg aacactttct ttgtttcttt gtgcaagtta gagacagcga
                                                                     2700
tectggetge caggatagea tagteagggt gettagtagt caaggttgea getgttteag
                                                                     2760
cagccaaagt atctagttcc actgtggtga ccccactgta caagccttgg attactttca
                                                                     2820
tggtgatctg agcaggatca acaaaatcca tattgagtcc ataacaaagc ttctggattc
gagatgtaat tttgtcaaac atgactcgtt cttggcggcc atctcgcttg atcacatgca
                                                                     2880
tegeagetag tggetgagge tetgaaggat ceaagactgg actgeggete taaagegeeg
                                                                     2940
gcgggatcga gaaggtgaca gagtgggaag ggttaggttc caggcgctgc tcaggggaaa
                                                                     3000
gaactggagt tggagccaga cagcactttc ttcagagcag aggcgcaaca atccaaatcc
                                                                     3060
                                                                     3071
ccttcgcgcg c
```

```
<210> 6148
<211> 3691
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (155)...(2008)
<223> similar to gi840789 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6148
                                                                        60
qtcgactaca aggtggctac gagttttcca gatttaggag acttcagaaa ggtggggcag
atagaatgga gatggcaaag atctctttgg gcatatatgg gcctggcgaa gtaatggaat
                                                                       120
aatttctaat tttcggagaa gccctcatgc cgggatggca gaagatgagc ctgatgctaa
                                                                       180
                                                                       240
gagccccaag actgggggaa gggccccccc aggtggtgct gaggctgggg aacctaccac
ccttcttcag aggctccgag gtaccatttc caaggccgtg cagaacaaag tagaggggat
                                                                       300
cctgcaagat gtacagaaat tttctgacaa tgacaagctg tatctctacc ttcagctccc
                                                                       360
                                                                       420
ctcaggaccc accactggag acaaaagctc agagccaagt acactgagca atgaggagta
catgtatgcc tataggtgga tccgcaacca cctggaagag cacactgaca cctgtctgcc
                                                                       480
aaagcaaagt gtttatgatg cctatcggaa gtactgtgag agtcttgcct gttgccgccc
                                                                       540
                                                                       600
actcagcaca gccaactttg gcaagatcat cagagagatc ttccctgaca tcaaagctcg
aaggettggt ggeeggggee agteeaaata ttgetacagt ggeataagga ggaagacett
                                                                       660
                                                                       720
ggtgtctatg ccacccctgc ctggacttga cctaaagggt tctgagagtc cagaaatggg
                                                                       780
 cccagaagta accccagcac ctcgagatga actggtggag gcagcgtgtg ccctgacctg
 tgactgggca gagcggatcc tgaaacggtc cttcagttcc atcgttgagg tcgcccgctt
                                                                       840
 cctgctacag cagcatctca tctctgcccg atctgcacat gcccatgtgc ttaaggccat
                                                                       900
                                                                       960
ggggettget gaagaggaeg aacatgcace tegggaaegg teatetaaae caaagaatgg
 tttagagaac ccagagggtg gagcccacaa gaagccagag agactggccc agcctcctaa
                                                                      1020
```

```
1080
ggatetggaa geeegaaetg gggeeggtee tetegeaegt ggagagegga agaagagtgt
agttgagage teggeeceag gageeaataa cetgeaggtt aatgeeetag tggetegget
                                                                     1140
                                                                     1200
gestagets attacaggg accetagets actualtage schalaceag tetataceae
                                                                     1260
tattctggcc cccaggcttt cttcaggtgc cctgaaagtg gctacactgc ctctgtctag
                                                                     1320
tagggeeggg geaececeag eagetgtgee cateattaac atgatettac caactgttee
                                                                     1380
tgctttgcct ggacctggac ctgggcctgg gcgagctcca cctgggggac tcactcagcc
                                                                     1440
ccggggcaca gagaacagag aggtaggcat aggtggtgac caaggaccac atgacaaggg
tgtcaagagg acagctgaag tacctgtgag tgaggccagt gggcaggctc caccagctaa
                                                                     1500
agcagcaaag caggatatag aggatacagc aagtgatgcc aaaaggaaac gggggcgccc
                                                                     1560
tctaaaaaag tcaggtggaa gtggggaaag gaattctacc cctctcaagt cagcagctgc
                                                                     1620
                                                                     1680
catggaatct gcccagtcct caaggttacc atgggagaca tggggctcag gaggggaagg
                                                                     1740
caactcagct ggaggggcag agaggccagg gccaatggga gaggctgaaa agggggcagt
acttgcccag gggtcaggga gatggtactg tttccaaagg aggaaggggc cccggttccc
                                                                     1800
agcataccaa agaagcagaa gataaaattc ccttggtccc ctcaaaagtg agtgtcatca
                                                                     1860
agggcagcag aagccaaaag gaggcttttc ctttggcaaa gggagaggta gacactgcac
                                                                     1920
cacagggtaa taaagactta aaggagcatg tgcttcaaag ttccttatcc caggagcata
                                                                     1980
                                                                     2040
aagacccaaa agcaacaccc ccatgataca ggtctgtggg gaagagtgtt tatatcccta
cgttaacttt gcctagtaga ggcccttctt tgcacttgct tctcatttgg ctattctttt
                                                                     2100
cctaaggaag tccattctcc tctgtacaga cagctgagtc acccagtcta cttagtacct
                                                                     2160
ggttgctgcc tctgaccttt tcagcttgat accctgggct ttagtgtaac caataaatct
                                                                     2220
gtagtgacct tacctgtatt ccctgtgcta tcctgtggga aggtaggaat gggctaagta
                                                                     2280
tgatgaatgt ataggttagg gatcttttgg ttttaaatca cagaaaacct aattcaaact
                                                                     2340
ggcttaaaat aaaaaggatt tattggttca tgtaactaga aagtccatag gtagtgctgg
                                                                     2400
ctccaggtga agacttgacc cagtagttca gtatgtctct aaataccgga ctgacttttt
                                                                     2460
teteactgtt geatettetg taggaceatt taagtetggg ceaettaatg getgeeagea
                                                                     2520
ttcctaagat tacacttttc cccatttatg tccaatcaga aaaagaaggc atctttgtac
                                                                     2580
cagaaatete agcaaaagee etaatattea caetgattag geetgggtea catgtecace
                                                                     2640
etgaccaate actgtggcca ggaggatgat acatgetaat ttgettatte tatateatgg
                                                                     2700
acaacacctt tggggaaaag ggtgggggtc agcctcccca aaatcacatg gattccccaa
                                                                     2760
                                                                     2820
gtggaaacta ggagcaggga gttgcttggg tggccgctaa caccaggcta ctcttatttt
agcttgctaa gttgagatca gctagacctg ctttcttttc tcctcagtct tgcatttccc
                                                                     2880
tcaatacaag ctgcagcctc tttcctcgtt tctagtctca gaaggaagga gagggaagcc
                                                                     2940
atteteetet agggaetett eagteteatt tagatgatag teeettittt tetaeeteea
                                                                     3000
tattagagat ggageteett cetttteetg tttettaatt tttgtettet catteetget
                                                                     3060
teceteteae cetattgeca gttecaceaa etagagtgaa agaetteeta gecattteat
                                                                     3120
taaatctatt ctgtatccac caggtggcag catcttgtca tacgtgtcag gacttaggac
                                                                     3180
tgcggggttt aggttagatg tcacggaaaa agctagttct gtggtcaggc ggcaccaatg
                                                                     3240
agaaaggaat gcagaccctc cagatgtatc cttgggaaaa gcagtaaacc aactaatatt
                                                                     3300
tattgaagac ctactttgtc ctctacatag ggtagcttct gtcagggaat cttggttctt
                                                                     3360
cccaagaaac actgattttc tttcagggag acttcatgtg ttcatttatt tccaccacag
                                                                     3420
cagattttaa gaaattataa tatgtaatat ttgatatcta taaagagtat atctaacgtg
                                                                     3480
aataaattat gaagcatact aatgagtacc tatgacccat aacacatata cattaaaaca
                                                                     3540
ttttaaatac caaaaaaaa aaaagggggg gcccttttaa gggaaccaat tttaactccc
                                                                     3600
gggggtggga aaggaaaaat ttttttatg gggccccaaa aataaattcc tgggcccgtt
                                                                     3660
tttaaacacc ccggggaggg aaaaaccctg g
                                                                     3691
```

```
<210> 6149
<211> 4511
<212> DNA
<213> Homo sapiens
<220>
```

```
<222> (1)...(4512)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4249)...(2200)
<223> similar to gi1922313 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6149 atatacatta agagtagatt tttttgttta atttcacaaa actattttgc agagttcact 60 tgtatcatct ctancettat agtaaaaatt ttaagattta acteggettt etcaggttat 120 ttccctctac ccctatgaac tgctgagttt tagttccttt tctggccttc agttttcact 180 atctgtaaag ctgaaggact gtattatatt acctccagta tcttttctgg tactaatttt 240 taaaatacct gatcagaatg aagccatcat agtgtaaggc agcatatttg tctataagga 300 gactttccaa agacagtacc catccaatgc aaataataaa tttgaagcta atcatctgtt 360 gtgctttaaa atgagcaaat tcacatgtct ttattgccct ttgaaagttg gttaatctca 420 aaaactacct tttttttaaa tatcctttgc aaggtcaatt gtaacagttg tccatccttc 480 ctcttccctt tgaaataaac acaaatagaa tatatcttac agctgcaaga aaacctgagt 540 cctttccaaa acaaaggtga ctgaagtaaa ttatctctaa aacttattcc atagacttca 600 tttattaata agcatattgt gaaaatctac atttgtttta gatttcatgt ttacagaqct 660 tttcacaatt gtattaggat ctttcacaac tactctctgg gtttaatgaa cagtaaagaa 720 tetggeteat gtgaccetet atteataget eccetttgge teetgtgaag gagetgatag 780 ttccctggag taaataaatc aaaacaagat atccttggga gatttttagc tgttaatcta 840 ctcctggacc ccatcctggg aactgaggga aaactcctag agagatatac aaatctttga 900 acaaaatatt tacatgaaaa gtggccagtt ttcttccttg gagtagcaat ctgtaaaaat 960 aagtgctgct gtttaaaaag tagcatgccc tacaccatac caatgtatta gtgagaattt 1020 ggcgattctc accaaacaac aatgaagttt cacatttggt actggatgga gcttgggtta 1080 gatctgcctt ttaaggcaaa gtcaactctt tcaacttaat tctttttcaa gggagtaatg 1140 tactgtctac acttggctta aactaacttc tattatggac tactttcaat gtacatgtaa 1200 atgttcatgc atcagaagcc aatttctttt aacagtacat agaaaaggta tattttgggg 1260 tgctaatgaa cacttcaaat taagtaatga tattggtaag gatcaaactg cactattagt 1320 cttgttaata ccacactggc acacacactg catatatatg tattttccta agataaaact 1380 cttctcagaa tttcattact ttttattata caccaactag tttatattgt agttctttac 1440 aaagaaaatg ctaagaaaaa ttataatcac atgttatatg gttttaaaat aataattcca 1500 gatttettta catataagat ggaatggtee ageagetata teeactgtea cagaetttag 1560 ttccgttcaa tgatatggca catcctgcaa aattaactag tcacacacaa aaaatgtctc 1620 aaatacagta aaaatgtaca cacaaaggta atttacaatg acaaggaatg taatttttct 1680 tggctgtgct tcagaaattt agggtcagta gccttaatca aggcacaaag caggaaaagg 1740 tgagcacagc tgtctctagg agtgggcaag gtatgtacaa tcactgatga ggtatgcatg 1800 cacgcaaagg atttaaaact gctcagtctc actacaaaaa ttgaactgag ttaaaaggaa 1860 atgctgtggc ttccccctac tatctggctc tggattgagt ccacagtctt acttcatcaa 1920 atagaaaata aaactgacaa ggatctccaa aagtaaatca ctatttqtqt aaatqaaaca 1980 aaatgettea ttaateeeag ttettggttg tgeeteetgg actagaagea ttttgtagae 2040 aaaagagtgt ttcacaaaat tgaaatgtaa ttcaggtgaa ggacaaaaca ttttccacag 2100 acacttaaaa ttccaaactt tcaaatggcc cttacagctg aaccgttgta tgttacagta 2160 gtgagggttc tgggtatcct ttagcagcaa atgccggttt aaagggcacg gggtctcttc 2220 gggttgattt gcttgctggc ttgttcctcc tcttgtagag ctgcacggaa agatttcact 2280 ttatcccgca gttcagttaa aatgtctatt ttttgctcaa gaatagcttc aagttgtgta 2340 gcatatgaat cgacatcata atctacttct tcagtcatct ctaagagggc cttttcatct 2400 tctaaccacc gaatagattc ctggaacact gccctgtgat cttctacaac ttgttcttcc 2460 atttctacca tttgtgaaac agcttcgtgg aaagtaaaca actgtggaga gacttcttct 2520 tcattttgtt cacaaagaag ttttagatca tctctctgag gggaactccc cacaccccac 2580 tgtgtctcta agtcatcaaa tctggtttgg tggatggtgc attattggac gaacatcacc 2640

```
2700
agcagcagtt ggatctacag tcaattcttt gaccctattt gcatatctta atgtattaag
                                                                    2760
agtattttca caggatgcca ttcctggaga gattgtggca atcatgcagg tacgagagtt
ttcacctatg aaagaatctc ttaacacctg agtgagttta cttgcacgga aaggagtatg
                                                                    2820
aggtttattt ctacctaagg ctctgatgca ctccttgagt gctaaaaggc ttttattaat
                                                                    2880
                                                                     2940
ttcagcacct tcaagcctag tttgcctgtc cgcactggaa gtatcagctc ctctttcatt
                                                                     3000
tccagccaaa tcaatgagag aaaatttgcc atgtagtttt cctttccttc taagaataat
                                                                     3060
ctgaaacact gcatggctcc gagatgaatg tgcatttgca gatgtttgac cggatgttct
gcaactgttg cctatgtcaa tgagtttcag tacatcttca acacatttga cctcccgttc
                                                                     3120
                                                                     3180
ctgtaatccc accacttgaa cctgctgttt tccatcttct agaactctta attttgtttt
                                                                     3240
cctgtttagc aagtcaaaca cctttccact ataaatttca aagaaggttg catatacttg
                                                                     3300
aagttctagc ttcttatagt ttggcttctt tagcattaaa aagacatctc gagctgctaa
                                                                     3360
tgcataaatt cctttagaac aatcttggtt ctttcctgaa aagtcaccac ccatagtatg
                                                                     3420
agtttttcca cttccagtct gcccataagc aaagcatgta gccattcccc tttcaaatat
agtttccact agtggtctag cagtaaacct gtaaaccatt tcattaggag ctgagtcatc
                                                                     3480
aaaggcataa tcaaaacgaa atgtttggtt ttctaggtac cttgttaaat ctactttttg
                                                                     3540
ttttggttca tgtaccatca caacatcttt actaggaatt gtgattacat caagatcttt
                                                                     3600
catttgagtt tetttttat tgagtggteg ttttettaca cacacacata teetatgtte
                                                                     3660
                                                                     3720
atcaatagga totgotgttg ttaatggtot ataatccaaa ottoototaa agtototgat
catacacata atttcataat ttgggtttgt agcatcaacg tcctgggctc ttttttctct
                                                                     3780
aagttettge tgttgeaate teettttete tegtttttet tgeagttttt etaettett
                                                                     3840
cacacaatta gattttctac gtgaaggggg tccaaattcc ttttttgcag cttgaactgg
                                                                     3900
agatatatet gaaaacaeta eeattetgtt gtgeagagga aaaetgttea ggaaattgae
                                                                     3960
tgggccgtgc acgtgctgaa ccaaccactc tattatctct ttgaaggagg gtcattctta
                                                                     4020
atagaagett acagteegte gattetttae aattttgttt actttggetg aggatgetgg
                                                                     4080
aggtggaggt gtttcttgga cttggttcaa tttctccatc aggaacaaag gtccagggtt
                                                                     4140
                                                                     4200
aaqtqaaaag atgctctcca ggtcaatctc ctttgccttt tgtatctcca ttttctatcc
                                                                     4260
attcaacagt tacactttca ttatcttcat ttaaagatgt taccattgct tgatgtattc
                                                                     4320
ggccggatgt ggtgtgcatc tgtagtccca gctacttggg aggctgagcg gggaggatca
                                                                     4380
gttgagccca ggaggcagag gttgcagtga accgacatca caccattgca ctccagtctg
ggagacagaa taagactcta tcccgactgc gcttgatctc cacgtaaatc ccgatctgga
                                                                     4440
                                                                     4500
tettgeegaa gttggegttg ceateacete atetggagea ggageagege gtetgaggga
                                                                     4511
gggggaccgg a
```

```
<210> 6150
<211> 1510
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1467)...(267)
<223> similar to gi5052353 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6150

ttttttttt ttcaaggttc acggggttta ttagggagtc gggagggaga aaacccagga 60
gtccccaggc catccacatt gctccccggc atgtgacgat ccagcctggc tttctctggt 120
cctttctgga cagaggctgg ccaagcaggc agcagcctca aggggagtgg gtaggagctg
ggggccttct ggcagcccta ctcagaggat gatctggttg gtgaagcttc ggctcagctc 240
cttgtgtggc agaacaatcg agttcaggat gagcacctcg gcagggatcc ggactcggca 300
```

```
gcccaggatg gtgatagcag gcagcagctt cccgtccttg aagaggctct cactgtccat
                                                                      360
                                                                      420
gegggetegg ggategttgg ggttagggte actgggggta ceetceacge gggeecageg
                                                                      480
teccaeggtg etecceage ceaegatget atgeagaaca caegtgtget cetgeaaagt
ggctccatgg aggacgatgc tctcccggag ccgcacaccc tcacccacgg tcaccccctt
                                                                      540
                                                                      600
cccgatggag acgttggggc ccagcacagc cgagggggcc accttggcgg tcgggtggat
                                                                      660
gtacacattc cctcggatcc atgggccccc tggggtgtgc ttggccagcc gttctgggtg
                                                                      720
agtgtcctgg tatcggctca ggtagaggcg ggaggcgtag agggctgaac ctgcggactt
                                                                      780
gatetgacte cagataceat cagtgagatg cacgtatate tggccetgce etgccaggge
                                                                      840
tgaaaacaca tcctgctcta ggcggatggt acctgcccct ggccacaagc ctggtgagtc
ctccaattgc ccatcctgct gattacgctg gaagacatcc cgaagaggct tcaaggcttc
                                                                      900
                                                                      960
aggagaaaag aggtagatgc cgcagttgat gatgtcactg ataaatgtgc tgggtttctc
                                                                     1020
cacatagtgc aatacetegt gtgtetgtgg atteteaacg atgeageegt agttgaggga
                                                                     1080
ttgcgtcctg ttagccgtag tgccaaggag taagaaaggg tgacgctggc gtcggtgggc
                                                                     1140
ttccaacata gcactcaagg ggaagtcgga gcagacatca gcattgagca cgaagaatgc
cteggggctc ccagccagga tetggtctcg aaaatggtaa agaccaccc ctgtgcctag
                                                                     1200
                                                                     1260
gggggcaaat teetgeaggt acctgactgg aaggttaaac teetgetggg eggettetag
                                                                     1320
gaactgggtg aggggctcat caggttggta gaagccaatg agcagaatct cctgcattcc
agggacctgg gcacaggctt caatatggtg ttggatcata gggacccctg ccacaggaaa
                                                                     1380
caatggtttg ggcacctcaa aagacaaagg tctgaagcga gttccctttt gagggcctcc
                                                                     1440
                                                                     1500
aatcaggatc accgctttga gcataatggt gactgctacc taaacactag ctcccttcac
                                                                     1510
tccagctctg
```

```
<210> 6151
<211> 2591
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (78)...(1172)
<223> similar to gi619884 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6151
ccaggtgact gactaatccg ccgccttcag gagacagaat tggccaaggc ctgaaggccc
                                                                       60
eggagtgeae cageggeatg tacaaagaga eegtetaete egeetteaat etgeteatge
                                                                      120
attacceacc cccctcggga gcagggcagc acccccagcc gcagcccccg ctgcacaagg
                                                                      180
ccaatcagec ecceaeggt gteeceeaac teteteteta egaacattte aacageeeae
                                                                      240
atcccaccc tgcacctgcg gacatcagcc agaagcaagt tcacaggcct ctgcagaccc
                                                                      300
ctgacctctc tggcttctac tccctgacct caggcagcat ggggcagctc ccccacactg
                                                                      360
tgagctggtt cacccaccca tccttgatgc taggttctgg tgtacctggt cacccagcag
                                                                      420
ccatcccca cccggccatt gtgccccct cagggaagca ggagggtgca gcccttcgac
                                                                      480
cgcaacctga agacacaagc agagtccaag gcagagaagg aggccaagaa gccaaccatc
                                                                      540
aagaagcccc tcaatgcctt catgctgtac atgaaggaga tgagagccaa ggtcattgca
                                                                      600
                                                                      660
gagtgcacac ttaaggagag cgctgccatc aaccagatcc tgggccgcag gtggcacgcg
ctgtcgcgag aagagcaggc caagtactat gagctggccc gcaaggagag gcagctgcac
                                                                      720
atgcagctat acccaggctg gtcagcgcgg gacaactacg ggaagaagaa gaggcggtcg
                                                                      780
agggaaaagc accaagaatc caccacagat aactctcttc actattccta ggaggaaaaa
                                                                      840
gaaatgcatt cggtacttac ccggagaagg ccgctgcccc agccccgttc cttccgatga
                                                                      900
cagtgeteta ggetgeeceg ggteeceage teeceaggae teaceeteat aceatetget
                                                                      960
```

```
1020
geoegette eccacagaae tgettaetag eeetgeggag eeggcaeeta cateeccagg
tetetecaet geteteagee teceaacece agggeeecea caggeeecee geageacect
                                                                    1080
gcagagcaca caggtacagc aacaggaatc tcagagacag gtggcctagc aggcacagga
                                                                     1140
cacctggccg cctccaggag cctacccct gaaagtgaca gagacccaga tctcatggaa
                                                                    1200
                                                                     1260
actggccagg ggtcctgtta acgtcatctc agggtccaga ccctgaagat ttcagaggct
gcagaacttc tgcctgaacc tggggtcatc gattcaaact gctccaagtg gtgggaatca
                                                                     1320
gatctgtctt gatgtgtcat ctaattaagg gaatcccttg tacctatggc tgcctgcatc
                                                                     1380
                                                                     1440
tattetttgt accatetgte ttgecageca gaageetetg cetecetage ttttetgeta
taggtcagag atgggctgaa ctgagcctag ctaccttctc tacccatctc ccccatcccc
                                                                     1500
                                                                     1560
cactgccaca ccctccccat tcagacactt catggaccaa gaatgagctg gtttgtcaaa
                                                                     1620
caacatgtga gcatggtcac aagcacaaag ctcaagatga cagctcttct aaggaaatgg
                                                                     1680
agaagctctg tttataaaaa caaaaacaaa accagctgct actcataagt tggaccagag
                                                                     1740
qaaqcccctt actatgatct caggagcttg caagaagcag gaaggggaat ggaataggtt
                                                                     1800
aagtttaggc ctatcaacct aagcaacaga aataatctga cactacctta tcaggcaaat
                                                                     1860
tggggagggg agggtgtatc tagctctagt tcaaattatt tggaagtgtt ccctgagaaa
                                                                     1920
cccaccagcc taagaagctc tggccccagg cttgtcacta gcagctgcag tcaacagttc
aaagaagtca tggcccaaat ccagtgtgca cccctcccca ttcacagagc ctttttcaca
                                                                     1980
attccatttc cagttcatct atggcagtcc agccagctcc tgggcagctt gagagggcaa
                                                                     2040
                                                                     2100
acccaaaacc tcatgacagc cagagcctgt ctttcagcat tcagtccgcc tggccggctc
cagtttcccc atggggctgc gggacagagg accattacaa ctagatcaag gagcccagaa
                                                                     2160
aacctccagt agtggacaac aggttttcac catagcctac gttaacccat ttttgagcca
                                                                     2220
agetteaace eteageettg aaaaacaagt etttaattta atttttgttt tttgeetaaa
                                                                     2280
tccaaagaaa aagggctgtc gggccaggcg cggtggctca cgcctgtaat cccagcactt
                                                                     2340
tggcaggccg aggcaggtgg atcacctgac gtcagtagtt tgagaccagc ctggccaaca
                                                                     2400
tggtgaaacc ctgtatctac taaaaataca aaaattatcc ggacgtggtg gtgcgcgcat
                                                                     2460
gtaatcccag ctactcggga ggctgaggcg gaagaatcac ttgaacccgg gaggcggagg
                                                                     2520
                                                                     2580
ttccagtgag ccgagatggc gctattgcac tccagtctgg gtaacaggga gactgcatct
                                                                     2591
caaaaaaaa a
```

```
<210> 6152
<211> 1076
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1006)...(26)
<223> similar to gi4929593 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6152
ttttttttt ttgagattct attcatagaa tcattcttcg aatgccacat tcacagcaaa
                                                                       60
atttggccca ttctacaggg tatttagtcc cacactcatg gcagaaattt tggaaagttt
                                                                      120
ccaggggaat gtccttcaat gcctttaata tttccaccat taagggaaga tgcacagtcc
                                                                      180
ccatctggcc tggctatgta gctctcagta tatgtttttc ttttgtttgt aagcacact
                                                                      240
ggggcaggat ttcttgccaa actaggtggt gtggaatttc ggggtttgac attagctcct
                                                                      300
gcatgagggg ctgctatccc tttatgagag ggagacaagg tctgaagttt gtttcccaaa
                                                                      360
                                                                      420
gagetgetae ttgaagacae tttacetgaa ggaacaeeta caacagtttt gecagegeca
cttggctgcg gtaatcgtga agatcctgat gatgcagttc caggagaatt tgacttttta
                                                                      480
agtgcgggtg gcttatacac ctgtgtccga gaagttggtt ttcctttggt atctgtagaa
                                                                      540
```

```
600
aatttccctt tattactaat acgtgctgcc tgttctttac agaaatttat atgtctatca
                                                                      660
gctgcatttt cattgaatct cctctgacaa tatgggacca ttgaatataa tcaggatcat
aagaaggtgg aggaggagga ggaagtttgc caccetettt gagggeetga teaaggeett
                                                                      720
tagctgctct tatggtagca atgaattctt catgtttcct tctccaatta gatggtttct
                                                                      780
                                                                      840
ttggtggttc tggcctcggt ttgagaggtt ttactgttgg aatatcagtt ccttcagctc
                                                                      900
tetgtetget tgaateaaaa gtetteegtt ttttagttge agtettetgg caaatgggte
                                                                      960
catgtttttt taatgctact ggaaagaatg ttcttccaca aatcttgcaa ggtaacaatt
                                                                     1020
ctccaacttg gacaacacct ccattctctt ccagtccctc catcgcgcca cctcctcgag
ctcagcgaga ctccttcagc agcgcccgcc accgcccagc tctggctgta acgaaa
                                                                     1076
```

```
<210> 6153
<211> 4871
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (92)...(2950)
<223> similar to gi755748 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6153 ggcacgagga aacctctagg tccaccacct ccatcttaca cgtgtttccg ttgtggtaaa 60 120 cctggacatt atattaagaa ttgcccaaca aatggggata aaaactttga atctggtcct agggattaaa aagggccact ggaattccca gaagtttcat ggatggaagt gaaagatcct 180 240 aatatgaaag gtgcaatgct taccaacact ggaaaatatg caataccaac tatagatgca agaagcatat gcaattggga agaaagagaa acctcccttc ttaccagagg agccatcttc 300 ttcctcagaa gaagatgatc ctatcccaga tgaattgttg tgtctcatct gcaaggatat 360 tatgactgat gctgttgtga ttccctgctg tggaaacagt tactgtgatg aatgtataag 420 aacagcactc ctggaatcag atgagcacac atgtccgacg tgtcatcaaa atgatgtttc 480 tcctgatgct ttaattgcca ataaattttt acgacaggct gtaaataact tcaaaaatga 540 aactggctat acaaaaagac tacgaaaaca gttaccttct ccaccaccc caataccacc 600 660 tecgagacca etgatteaga ggaacetaca acetetgatg agateteega tateaagaca acaagateet ettatgatte cagtgacate tteateaact cacceagete egtetatate 720 ttcattaact tctaatcagt cttccttggc ccctcctgtg tctggaaatc cgtcttctgc 780 tecageteet gtacetgata taactgcaac agtatecata teagtteatt cagaaaaate 840 agatggacct tttcgggatt ctgataataa aatattgcca gctgcagctc ttgcatcaga 900 gcactcaaag ggaacctcct caattgcaat taccgctctt atggaagaga agggttacca 960 ggtgcctgtt cttggaaccc catctttgct tggacagtca ttattgcatg gacagttgat 1020 ccccacaact ggtccagtaa gaataaatac tgctcgtcca ggtggtggtc gaccaggctg 1080 ggaacattcc aacaaacttg gctatctggt ttctccacca caacaaatta gaagagggga 1140 gaggagetge tacagaagta taaacegtgg gegacaceae agegaaagat cacagaggae 1200 teaaggeeeg teactaceag caacteeagt ctttgtacet gttecaceae cteetttgta 1260 teegeeteet eeccatacae tteeteteee teegggtgtt eeteeteeae agttttetee 1320 teagttteet cetggeeage cagecaceeg etgggtatag tgteeeteet eeagggttte 1380 ctccagctcc tgccaattta tcaacacctt gggtatcatc aggagtgcag acagctcatt 1440 caaataccat cccaacaaca caagcaccac ctttgtccag ggaagaattc tatagagagc 1500 agcgacgact aaaagaagag gaaaagaaaa agtccaagct agatgagttt acaaatgatt 1560 ttgctaagga attgatggaa tacaaaaaga ttcaaaaagga gcgtaggcgc tcattttcca 1620 ggtctaaatc tccctatagt ggttcttcgt attcaagaag ttcatatact tattctaaat 1680

```
caagatetgg tteaacaegt teaegetett attetegate atteageege teaeattete
                                                                     1740
gttcctattc acggtcacct ccatacccca gaagaggcag aggcaagagc cgcaattacc
                                                                     1800
gttcacggtc tagatctcat ggatatcatc gatctaggtc aaggtcaccc ccttacagac
                                                                     1860
                                                                     1920
getateatte aegateaaga teteeteaag egtttagggg aeagteteet aataaaegta
atgtacctca aggggaaaca gaacgtgaat attttaatag atacagagaa gttccaccac
                                                                     1980
catatgacat gaaagcatat tatgggagaa gtgttgactt tagagaccca tttgaaaaag
                                                                     2040
aacgctaccg agaatgggag agaaaatata gagagtggta tgaaaaatat tataaaggtt
                                                                     2100
atgetgetgg ageacageet agacceteag caaatagaga gaaettttet ceagagagat
                                                                     2160
ttttgccact taacatcagg aattctccct tcacaagagg ccgcagagaa gactatgttg
                                                                     2220
gtgggcaaag tcatagaagt cgaaacatag gtagcaacta tccagaaaag ctttcagcaa
                                                                     2280
gagatggtca caatcagaag gataatacaa agtcaaaaga gaaggagagt gaaaacgctc
                                                                     2340
caggagatgg taaaggaaat aagcataaga aacacagaaa aagaagaaaa ggggaggaaa
                                                                     2400
gtgagggttt tctgaaccca gagttattag agacttctag gaaatcaaga gaacctacag
                                                                     2460
gtgttgaaga aaataaaaca gactcattgt ttgttctccc aagtagagat gatgccacac
                                                                     2520
ctgttagaga tgaaccaatg gatgcagaat caatcacttt taaatcagtg tctgaaaaag
                                                                     2580
acaagagaga aagggataaa ccaaaagcaa agggtgataa aaccaaacgg aagaatgatg
                                                                     2640
gatetgetgt gteeaaaaaa gaaaatattg taaaacetge taaaggacee caagaaaaag
                                                                     2700
tagatggaga acgtgagaga tetectegat etgaacetee caattaaaaa ageecaaaga
                                                                     2760
ggagactccg aaggacttga caatactaaa tcatcatctt cctctcagaa ggatgaaaaa
                                                                     2820
atcactggga acccccagga aaagctcact ctaaatcagc aaaagaacac caagaaacaa
                                                                     2880
aaccagtcaa agaggaaaaa gtgaagaagg actattccaa agatgtcaaa tcagaaaagc
                                                                     2940
taacaactaa ggaagaaaag gccaagaagc ctaatgagaa aaacaaacca cttgataata
                                                                     3000
agggagaaaa aagaaaaaga aaaactgaag aaaaaggcgt agataaagat tttgagtctt
                                                                     3060
cttcaatgaa aatctcgaaa ctagaagtga ctgaaatagt gaaaccatca ccaaagcgca
                                                                     3120
aaatggaacc tgatactgaa aaaatggata ggacccctga aaaggacaaa atttctttaa
                                                                     3180
gtgcgccagc caaaaaaatc aaactcaaca gagaaactgg gaagaaaatt ggaagtacag
                                                                     3240
aaaatatatc aaacacaaaa gaaccctctg aaaaattgga gtcaacatct agcaaagtta
                                                                     3300
aacaagaaaa agtcaaagga aaggtcagac gaaaagtgac tggaactgaa ggatccagct
                                                                     3360
caactctggt ggattacacc agtacgagct caactggagg cagtcctgtg cggaaatctg
                                                                     3420
aagaaaaaac agatacaaag cgaactgtga ttaaaacgat ggaagaatat aataatgaca
                                                                     3480
ataccgcgcc agctgaagat gttatcatta tgattcaggt tcctcaatcc aaatgggata
                                                                     3540
aagatgactt tgaatctgaa gaagaagatg ttaaatccac acagcctata tcaagtgtag
                                                                     3600
gaaaacctgc tagtgttata aaaaatgtta gtacaaagcc atcaaatata gtcaagtatc
                                                                     3660
ctgagaaaga aagtgagcca tccgagaaaa ttcagaaatt caccaaggac gtgagccatg
                                                                     3720
aaatcataca acatgaggtt aaaagttcaa aaaactctgc atctagtgaa aaagggaaaa
                                                                     3780
ccaaagatcg agattattca gtgttggaaa aggagaaccc tgaaaagagg aagaacagca
                                                                     3840
ctcagccaga gaaagagagt aatttggacc gtctgaatga acaaggaaat tttaaaagtc
                                                                     3900
tgtctcaatc ttccaaagag gctagaacgt cagataaaca tgattccact cgtgcttcct
                                                                     3960
caaataaaga cttcactccc aatagagaca aaaaaactga ctatgacacc agagagtatt
                                                                     4020
caagttccaa acgtagagat gaaaagaatg aattaacaag acgaaaagac tctccttctc
                                                                     4080
ggaataaaga ttctgcatct ggacagaaaa ataaaccaag ggaagagaga gatttgccta
                                                                     4140
aaaaaggaac aggagattcc aaaaaaagta attctagtcc ctcaagagac agaaaacctc
                                                                     4200
atgatcacaa agccacttat gatactaaac ggccaaatga agagacaaaa tctgtagata
                                                                     4260
aaaatccttg taaggatcgt gagaagcatg tattagaagc aaggaacaat aaagagtcaa
                                                                     4320
gtggcaataa actactttat atacttaacc caccagagac acaggttgaa aaagagcaaa
                                                                     4380
ttactgggca aattgacaag agtactgtca agcctaaacc ccagttaagt cattcctcta
                                                                     4440
gactttcctc tgacttaact agagaaactg atgaagctgc ttttgaacca gactataatg
                                                                     4500
aaagtgacag tgaaagtaat gtttctgtaa aagaagagga atcttcagga aacatttcta
                                                                     4560
agggacctga aagataaaat agtggagaaa gcaaaagaga gcctggacac agcagcagtt
                                                                     4620
gtccaggtgg gcataagcag gaatcagagc cacagcagcc ccagcgtcag ccccagcaga
                                                                     4680
agccacagtc cttctggaag ccagacccga agccacagta gcagtgccag ctcagcagaa
                                                                     4740
agtcaggaca gcaagaagaa gaagaaaaag aaggaaaaga aaaaacacaa gaaacataaa
                                                                     4800
aagcataaga agcataagaa acatgcaggc actgaagtgg aattggaaaa aagccaaaaa
                                                                     4860
cacaaacaca a
                                                                     4871
```

```
<210> 6154
<211> 3092
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (558)...(2945)
<223> similar to gi4589476 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6154 agcacctgct ccacagatgg tttggcactg atatgcagat gattaatttc acaactggtg 60 aattccagct caccgaagct tgcccttacc tgggtacgca ttctgaggaa tccaggtttg 120 gcatcctcca cttacatctg cagcctttgg aaatgaaaag ggttggcgta gttttcacac 180 ctgctgacta tggaaaagtt acctcactca tactaatccg gaataacttg actgttattg 240 acatgattgg cgtggaagga tttggagcaa gagagttatt aaaagtgggt ggaagacttc 300 ctggtgcagg aggctcactc cgatttaagg tgcccgagtc cacgctgatg gactgccgta 360 gacaactgaa agacagtaag caaattttat ctattacaaa gaactttaaa gttgagaata 420 ttggacctct tcctataact gtttcgtctc tgaaaattaa tgggtataac tgccaaggtt 480 atggattcga ggtgctggat tgtcatcagt tttccctgga cccaaacaca tcccgcgata 540 teageattgt gtteacteea gaetttaeet eeteetgggt aattegggae etaagtettg 600 taaccgcagc ggacctagaa tttcgcttca ctctcaatgt gactctccct catcacctgt 660 tgcccttgtg tgcagacgtg gttccaggac ccagctggga ggagtcattt tggaggctca 720 cggtcttctt tgtcagtttg tccctgttgg gtgtgatttt aatagccttc caacaagcac 780 agtacattct catggaattc atgaaaacaa gacagaggca aaatgctagc tcctcttcac 840 agcaaaacaa tggtcctatg gatgtaatca gcccccattc ttacaaaagc aattgcaaga 900 actttctcga tacatatggc ccctctgata aaggcagggg gaagaactgc cttccagtga 960 acactececa aageaggate cagaatgetg caaagaggag eccagecace tatggteatt 1020 ctcagaagaa gcacaaatgc tcagtgtatt acagtaaaca caaaaccagc acagctgcgg 1080 ccagcagcac cagcacgact actgaggaaa aacagacttc acccctgggc agctcactgc 1140 ctgctgctaa agaggacatt tgcactgatg ccatgcgtga gaactggatc agcctcagat 1200 atgcaagtgg cataaatgtc aacctgcaga agaatttaac ccttcccaaa aacttactga 1260 ataaagaaga aaacacactg aaaaacacaa ttgttttcag taatccttct tcagaatgta 1320 gtatgaagga gggaatacag acatgtatgt ttcctaagga aactgacatt aaaacttcag 1380 agaacacagc cgagttcaag gaacgggagc tctgtccact gaagacctcc aagaaactac 1440 ctgaaaacca tttaccaaga aactcacctc agtaccacca gccagacttg ccagaaattt 1500 ccaggaaaaa taatgggaat aaccagcaag tacctgtcaa gaatgaagta gatcattgtg 1560 aaaatttgaa gaaggtggac acaaagcctt cttcagaaaa gaagattcac aaaacatcta 1620 gagaagacat gttttctgag aaacaggaca tacctttcgt agagcaagaa gatccttata 1680 ggaagaaaaa gcttcaggag aaaagagaag gaaatttaca aaatttaaat tggagtaaaa 1740 gtcgaacatg tagaaagaac aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac 1800 1860 atgtaagaag ctggtgtata caggaaagca ctagggaggt ttgtaaagca gatgccgaaa 1920 ttgcaagcag tttacctgct gcccagagag aggcagaagg ttactaccag aagcctgaga 1980 agaaatgtgt ggacaagttc tgctccgatt ccagctctga ctgtgggagc tcctctggca 2040 gcgtgcgtgc cagccggggc agctggggga gctggagcag caccagcagc tccgacgggg 2100 ataagaagcc catggtggac gcccagcact tcctgccggc cggagacagt gtttcacaaa 2160 atgattttcc ttctgaagct cccatctcct tgaatctttc tcataacatc tgcaatccca 2220 tgaccgggaa tagtctccca caatacgcag agccttcctg tcccagcctt cctgccgggc 2280 ccacaggtgt tgaagaagat aaaggtcttt actcacctgg agacctgtgg cccactccgc 2340 cagtgtgtgt gacaagcagc ttaaactgca ccctggagaa cggcgtgcct tgtgtgattc 2400

```
aggagtcggc cccggttcat aatagtttca ttgattggag tgcaacatgc gaaggccagt
                                                                    2460
tttccagcgc atactgtcca ttggaattga acgattacaa tgcctttcca gaagaaaca
                                                                     2520
tgaactatgc caatggcttc ccctgtcctg cagatgttca gacagacttt attgatcaca
                                                                     2580
acteteagte tacetggaae acceeacee aacatgeetg cetecetggg gaaatgeeca
                                                                     2640
gtttccatcg agctctcggc cctacctcaa aagcaccccg aaagcttgtc tcccaatgtc
                                                                     2700
tggacttttt ggtcccatcc tgggccccgc caaagcgatg tgtatgaaaa ttgctgcccc
                                                                     2760
atcaacccca ccacggaaca ttcggacccc acatggaaaa ccaagcgggt cgtgtgcaag
                                                                     2820
gaatactacc cggggttcaa acccgtttcg cgcctatatg aacctggaca tatggactac
                                                                     2880
cacacgcgaa taggaatgca aatttcccac tgtctagaga ctcgagttac tgtgggaatg
                                                                     2940
tgtgaaaata attggatttt taatacaatg tgaataaaga ggcttgtgtt ttgattacta
                                                                     3000
gtgtaaactg gttattgaga tagattatga cattgttgga tattttggca cttttatatg
                                                                     3060
aaaataaatt ttttaatgaa aaaaaaaaa aa
                                                                     3092
```

```
<210> 6155
<211> 2252
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (49)...(2005)
<223> similar to gi187572 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6155 acctetegga etegaceega tteeeggtea eegatgatte gtgegaceea egegteegag 60 aaatgtgaga gcttcttgcc gccagagttc cgctcttttg ctgtagatcc ccagatcacc 120 togotogacg tgttgcagca catootoato ogagootttg atttgagtgg gaagaagaac 180 tttggcatca gctacctggg ccgggaccgg ctaggacagg aagtttacct ctcacttcta 240 tctgactggg acctcagtac agcctttgcc actgcctcca aaccttacct gcaattgcgt 300 gtagatattt ggccctcgga ggacagccca ttgctagaag actgggacat aatcagcccc 360 aaagatgtca ttggctccga cgtgttgctg gctgagaaac ggtcatcact gacgactgcc 420 gecetgeect ttacacagte catecteact caggtgggee gtacettgte taaggteeca 480 acaagtgctg agctggtcgt atggggaaga tgtcaagccc ttcaagccac ccctgagcga 540 tgctgagttt cacacgtacc tgaaccacga gggccagctc tcccgacccg aggagttgcg 600 cctgcggatc tatcatggcg gtgtggagcc ctcgctgcga aaggtggtgt ggcggtacct 660 gctgaacgtg tatccagatg gactgacagg ccgagagcgg atggactaca tgaaacgcaa 720 gagccgcgag tatgagcagc tcaagagcga gtgggcccag cgagcgagcc ctgaggacct 780 ggaattcatc cgcagcacgg tcctcaagga tgtactgcgc actgaccggg cccaccccta 840 ctatgcgggg cctgaggatg gcccacatct acgggcgctg cacgacctgc tcaccaccta 900 tgccgttacc cacccacagg tgtcctactg ccagggcatg agtgaccttg cctcacccat 960 cctcgctgtc atggaccatg agggccatgc ctttgtttgc ttttgtggca tcatgaaacg 1020 cctggccgcc aacttccacc ctgacggccg cgccatggcc accaagtttg cacacttgaa 1080 gctgttgctg cgacacgctg accctgactt ttatcaatac ctgcaagagg caggcgctga 1140 tgacctcttc ttctgttacc gctggctgct gctggaactc aagcgtgagt tcgccttcga 1200 cgatgccctc cgcatgcttg aggtcacttg gagttcgctg cccctgatc ctcctgaaca 1260 tgaggtagag ctggttggac cccccagcca agtggcagac actggttttg gtggccacag 1320 ggggtggccc gtgcgacaga ggcacatgct gaggcctgct ggtggaggag gtagtacctt 1380 tgaagatgct gttgaccacc tggccacagc cagtcagggg cctggtggtg gggggcgtct 1440 cctgagacag gccagcttgg atggcctcca gcaactcagg gataacatgg gctccaggag 1500

```
ggaccetetg gtecagetge eccaeccage tgecettate agetecaagt ecctetetga
                                                                    1560
geetttattg aacteeceag acceaetget etecteettt teecaecetg attececate
                                                                    1620
ttcctcatct ccaccatcca cccaggagge ctctcccact ggtgatatgg ctgtaggate
                                                                    1680
ccccttgatg caagaggtag gctccccgaa agaccctgga aagtccctgc cacctgtacc
                                                                    1740
accaatgggc ctgccccac cccaggagtt tggccggggg aacccattca tgctgttcct
                                                                    1800
ctgcctggcc atcctgctgg agcaccgcga ccacatcatg cgcaatgggc tggattataa
                                                                    1860
tgagetggee atgeaetttg acceettgt gegaaaacae cacetgggge gegteetgeg
                                                                    1920
ccgggctagg gctctctttg ctgattacct gcagtcagag gtgtgggact cagaggaggg
                                                                    1980
ggctgaggcc acagccgcat cttgatcagg ctttctcaag ccctccatcg gccccaccag
                                                                    2040
atotocatto titgocatga gggocaacao atgagaccoo acotocotoo cigocitgoca
                                                                    2100
gccctagact tgttggagca tagagccctt cctccccagg cctaagtatg tggagctctg
                                                                    2160
etttggcact geeegeaga ggeeaegeet atttattetg tttetgttgt tttgttttta
                                                                    2220
acaactatac tttgcacaca tgaaaaaaaa aa
                                                                    2252
```

```
<210> 6156
<211> 1604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (41)...(1091)
<223> similar to gi897909 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6156 ctgagetegg tegeggetge etgtetgete eggeageace atgtegetet tggtegteag 60 catggcgtgt gttgggttct tcttgctgca gggggcctgg ccacatgagg gagtccacaq 120 aaaaccttcc ctcctggccc acccaggtcg cctggtgaaa tcagaagaga cagtcatcct 180 gcagtgttgg tcagatgtca tgtttgaaca cttccttctg cacagagagg ggatgtttaa 240 cgacactttg cgcctcattg gagaacacca tgatggggtc tccaaggcca acttctccat 300 cagtcgcatg acgcaagacc tggcagggac ctacagatgc tacggttctg ttactcactc 360 cccctatcag gtgtcagctc ccagtgaccc tctqqacatc qtqatcataq qtctatatqa 420 gaaaccttct ctctcagccc agctgggccc cacggttctg gcaggagaga atgtgacctt 480 gtcctgcagc tcccggagct cctatgacat gtaccatcta tccagggaag gggaggccca 540 tgaacgtagg ctccctgcag ggcccaaggt caacggaaca ttccaggctg actttcctct 600 gggccctgcc acccacggag ggacctacag atgetteggc tetttecatg actetecata 660 cgagtggtca aagtcaagtg acccactgct tgtttctgtc acaggaaacc cttcaaatag 720 ttggccttca cccactgaac caagetccaa aacgggtaac ccccgacacc tgcacattct 780 gattgggacc tcagtggtca tcatcctctt catcctcctc ctcttctttc tccttcatcg 840 ctggtgctcc aacaataaaa aatgctgcgg taatggacca agagtctgca ggaaacagaa 900 cagcgaatag cgaggactct gatgaacaag accctcagga ggtgacatac acacagttga 960 atcactgcgt tttcacacag agaaaaatca ctcgcccttc tcagaggccc aagacacccc 1020 caacagatat catcgtgtac acggaacttc caaatgctga gtccagatcc aaagttgtct 1080 cetgeecatg ageaecacag teaggeettg agggegtett etagggagae aacaqeectg 1140 tctcaaaacc gggttgccag ctcccatgta ccagcagctg gaatctgaag gcatgagtct 1200 gcatcttagg gcatcgatct tecteacace acaaatetga atgtgcetet caettgetta 1260 caaatgtcta aggtccccac tgcctgctgg agaaaaaaca cactcctttg cttagcccac 1320 agttctccat ttcacttgac ccctgcccac ctctccaacc taactggctt acttcctagt 1380 ctacttgagg ctgcaatcac actgaggaac tcacaattcc aaacatacaa gaggctccct 1440

```
cttaacgcag cacttagaca cgtgttgttc caccttccct catgctgttc cacctccct 1500 cagactagct ttcagtcttc tgtcagcagt aaaacttata tatttttaa aataacttca 1560 atgtagtttt ccatccttca aataaacatg tctgcccca tggt 1604
```

```
<210> 6157
<211> 4471
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4451)...(1233)
<223> similar to gi4240201 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6157 ttcaaactaa aaactctaac gaatagacag tgagttttct ttgacataga gatgtcgcag 60 cctgagacat cgcagtctgc ggagaaagtt acttgtaggc gagtgtattt actattgtac 120 cacgcaggca ttgaacattc tcattaacat gataatacaa tttgctggta aacatttaaa 180 cacacagaca ttagtttcag tatctcaaca tatttttggt cataaccaag gaaatacatc 240 aaaataatgg acaaccattg gctaatattt tacaagcaaa tatttaactc tgcatagttt 300 ataccaatag getgtggeca ataaataatg teacceaate eteatecace tattaaetgg 360 cccacaagaa gccctaacat tccattttaa attatggata tggaaatggc tctattgggg 420 tagtttcaac atatccttaa atgtttgggt gtttaacctt gaatacaccg aaaaaaaaa 480 gtactaaact ggactaaaga aggtgtgttt ggttaactac aaatatgtca tgttcacata 540 gtacattcct aacatgaagg caaatattta aatagaaaaa ctagcagtcc aaaaaatgtg 600 aatgtgcaaa ttgtgagtaa aacattgcat ttaaatttgc actcatttgc aagttacagt 660 actageteag tataaacaet aacaggaaaa atatteagea ggaaagaatg gaaacggeet 720 ctcacagcag agaactggtc actgcgcact gctccacagc taagaaagtt ttccaggtgg 780 tctagcgctc ctaacaaaca ccttatgatt atccttcatt caacagagga ggagactgca 840 900 ggcatgcttc agtcagtggt aagaacagga agaaaaaccc aaatcagcaa cattttcttc cttaatttgg tataaacgtc cttttcatta tttcaagtta ctaatttgct aatctcaaat 960 gttttctgaa tcaggtttgg ctaaatgctg taaagaatag ctatccttca tacaatacta 1020 ggttttattt tttttagtat gtcagcataa taaggtacat ggcgcattca ttccaccaac 1080 ctgtttagat aatactcagc ttgggtcata ttcaaattct acacagagat tctctgtttt 1140 caatacaact gcttagaaag cagaattgcc tagtgatgac tgtagtgtgc cttttaactg 1200 aaatgtatat aaaaataaaa ccccaatctt tatagaatgt caagaattct gttagggatg 1260 ttaaaagcat tgggcaaaac cctggttttc agcgtgccat ctgcaccaca ggagaagagc 1320 cgattgccct ggatgatgtc aatctgcatg actccagccc caatgtttcg aaatatggac 1380 tgcttagcat gttcactttt aaatgaatga attaggccat ggcctgtcaa tctccaaacc 1440 tttatgttac cttctgctga acctgtggta aaatattcct catagggatc caaggccaga 1500 gccttaatag ctgagtcatg ggcctggaac gtgtgaatga gctgcctttg cctgatgtca 1560 aaaatgcaga cgtgtccttt cctaccccc gagattagga gttgctgttt gggtgcatac 1620 tgcagtaccg tggcaccatg atcgtggcac gtgaaaccat gaatgaggct gtttccgggt 1680 gatattaatg tgtcccagag gcaaacattt ctattgtcat tggagtgtcc agatgtggca 1740 actagacttg aagaggtaat aaatgcaaag tcacttgtgg ctttactgtg gcactgccaa 1800 ctcatataag gtttaggatt tgatgcagtt tggttaactt gccagatact cagaaaaccc 1860 tctccatccg caacaccaca cttgttgcct tgtgaattaa aatataatct agtaactctt 1920 gcattgccag cttgacgaaa gcagacaagt tgctgaggcc gcgtccattc aaacattcgt 1980 acactgccgt cctgagcacc tgtaagatag tattgatgga ctgggtgtga agtcattctc 2040

```
ttaacattat gtagatteet ttteataage acaetagete cagtgetagt etgtecagtg
                                                                   2100
cccagccatg gcagagatga aggtggatgc acctgacttg ctgaatagga tgttgcactg
                                                                   2160
ggttgataaa gagttgtagt ggaaccacga taatcaacat catctgaact tttggattct
                                                                   2220
ctgtcatatt cttctccgat ccatatgtat gactgacagg ccagtagaga agtaacatca
                                                                   2280
agttettgaa cateatgtgt tgaaqeeaaa acaattteat tacaatttqc ettattaaca
                                                                   2340
gaaaatgcca tqatcatatc agattcctta tqqatqactt tcqcctttcc acctqqataq
                                                                   2400
cccagatcag cttcaacctc actctgcttt cttttcttag tgaaaatata tctaataaat
                                                                   2460
gtctcttgaa ggacctcttt gtttaacaaq qaaatqccaa aqtcqtttqa ctqqaaatqc
                                                                   2520
caaaaaaatc ccgggactta atgggggtat tttcaggttc tagcattgct ttattttcga
                                                                   2580
aaataggett ggtecagete eeactgaaag gteagttgga tatgtgttga tatagttagg
                                                                   2640
gggtggacct tcaaactgat ccattttctc ttgcaagatc tgttcccagt tctccaaggt
                                                                   2700
2760
caataggaaa gaaattottg acattgtgaa gtgctagttt aaccattgtc aaatgtagaa
                                                                   2820
gagcccagct ataggaattt ggatcttggt gctcctgtat ttgtgtatct gaaaaaaaqq
                                                                   2880
catcatcttc ttcatcacta tgaatgcttt catcagaatc atatataaca ccactatcag
                                                                   2940
acaaaggaag aaatggcttt gcaacaaaat aatcccacat actaaqttcq qqaqqaataa
                                                                   3000
attittetti gtaagatggt ettietgeag geaeeggtgg tggggtagea tettittaeag
                                                                   3060
gccttccagg gacgagcatt ctcatqttaa atctcctacq qtqtttatct atqtcttcaq
                                                                   3120
aaaggacagg aggtgctgaa atattttctg attgtcttcg aggtttcaca acaagtttta
                                                                   3180
caccgcctcc aaaaacagca gcccacattc gattatttaa tgggtgggct gcaagccgaa
                                                                   3240
ataattcact ggaggaattt gtggcaagag catgtatcaa taaacttaag taaacagcaa
                                                                   3300
caacagette acatageaaa atgtteagtt ttggetggte tteatettgg getgaactea
                                                                   3360
aaagattaat aagtgagctc acaccaggcc attgagcagg agatgaattt ggtgttgcgt
                                                                   3420
gttcttcaat gctttctgtc cttagtcttc tacgatcact taaaaqaaqt ccttqataaq
                                                                   3480
ccattcctgt aaactgattt ccttctgttt gactgctgta gctatgactg tcacataatg
                                                                   3540
cttggtaaat tgatgcagaa agtgatgctg ctagtgaatg aagtgtgtgc accttcacat
                                                                   3600
cttcaatact gggatgaggt ggtgttttca tctgaacaat agtataaagt atatcatgga
                                                                   3660
tgtgattatt taagtacaat acaggattag ctatgactgt ttttgttgac gcaatacttg
                                                                   3720
ctgaaagcag aggtagggtg gtaggcagtg gtagtggaga ctggagctgc tttactqtaq
                                                                   3780
tttcctgttg tgattcttgt agcaaaaatt tgagttccat ccttactgaa gccaaaccac
                                                                   3840
caccttgggc cccatgaagg ctacagtagc tgagaaatac tctcaggaga tcttggtttt
                                                                   3900
tctgcaacca cgactttcgt ctttctgcat gctctcgttt ggcctgcaat cttcttcttt
                                                                   3960
ctatttgatg gcgctcatag gaaccaatat ctggtttqtc taccatttct tcctqatcca
                                                                   4020
gragatract ctctactttg gaatatgtct tactqqaata ctctttaata actqattcat
                                                                   4080
gattacatat ctcatgcaag gcagcaattt ccttttcaag ccagttatag agttgaaatc
                                                                   4140
tgagttttcc tccatctact tcataacctg tagccaatgt tcttaattca gtcataagga
                                                                   4200
tctttaaaca agctctgaat tttagttgtt cagcaatcac atcaacttca qtatcacctt
                                                                   4260
caggatcatc ctcttcctga ggtgttaata acatgttagg gtctgaggcc ttctgatctg
                                                                   4320
attgtttatc tttttccctg gcatctgtac ttttcatcac taaaccaaca gcttcgtctt
                                                                   4380
cctcttcatc taaggcactg tcgtgatctt caccccaatc aagattaaga ggttcctcat
                                                                   4440
caacttttac tattggctga ctccagtcat a
                                                                   4471
```

```
<210> 6158
<211> 2078
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(1958)
<223> similar to gil617312 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6158
cagaataaga aataactggt atttgtcaag tgacaagctt ttaatgtcag aatggctcac
                                                                       60
ctaaagcgac tagtaaaatt acacattaaa agacattacc ataaaaagtt ctqqaaqctt
                                                                      120
ggtgcagtaa tttttttctt tataatagtt ttggttttaa tgcaaagaga agtaagtgtt
                                                                      180
caatattcca aagaggaatc aaggatggaa aggaacatga aaaacaaaaa caagatgttq
                                                                      240
gatttaatgc tagaagctgt aaacaatatt aaggatgcca tgccaaaaat qcaaataqqa
                                                                      300
gcacctgtca ggcaaaacat tgatgctggt gagagacctt gtttgcaagg atattataca
                                                                      360
gcagcagaat tgaagcctgt ccttgaccgt ccacctcagg attcaaatgc acctggtgct
                                                                      420
tctggtaaag cattcaagac aaccaattta agtgttgaag agcaaaagga aaaggaacgt
                                                                      480
ggggaagcta aacactgctt taatgctttc gcaagtgaca ggatttcttt gcaccgagat
                                                                      540
cttggaccag acactcgacc tcctgaatgt attgaacaaa aatttaagcg ctgccctccc
                                                                      600
ctgcccacca ccagtgtcat aatagttttt cataatgaag cgtggtccac gttgcttaga
                                                                      660
actgtccaca gtgtgctcta ttcttcacct gcaatactgc tgaaggaaat cattttggtg
                                                                      720
gatgatgcta gtgtagatga gtacttacat gataaactag atgaatatgt aaaacaattt
                                                                      780
tetatagtaa aaatagteag acaaagagaa agaaaaggte tgateaetge teggttgeta
                                                                      840
ggagcaacag tcgcaacagc tgaaacgctc acatttttag atgctcactg tgagtgtttc
                                                                      900
tatggttggc tagaacctct gttggccaga atagctgaga actacacggc tgtcgtaagt
                                                                      960
ccagatattg catccataga tetgaacacg tttgaattca acaaacette teettatggg
                                                                     1020
aagtaaccat aaccgtggga aattttgact gggagtcttt tcatttggct ggggagtcgc
                                                                     1080
ttcctgatca tgagaagcaa agaaggaaag atgaaaccta cccggaaggg gcacccactt
                                                                     1140
ttgcaggagg actttttcc atatcaaaag aatattttga gtatattgga agctatgatg
                                                                     1200
aagaaatgga aatctgggga ggtgaaaata tagaaatgtc tttcagagta tggcaatgtg
                                                                     1260
gtgggcagtt ggagattatg ccttgctctg ttgttggaca tgtttttcgc agcaaaagcc
                                                                     1320
ctcatagctt tccaaaaggc actcaggtga ttgctagaaa ccaagttcgc cttgcagaag
                                                                     1380
tetggatgga tgaatacaag gaaatatttt ataggagaaa tacagatgca gcaaaaattg
                                                                     1440
ttaaacaaaa agcatttggt gatctttcaa aaagatttga aataaaacac cgccttcagt
                                                                     1500
gtaaaaattt tacatggtat ctgaacaaca tttatccaga ggtgtatgtg ccagacctta
                                                                     1560
atcctgttat atctggatac attaaaagcg ttggtcagcc tctatgtctg gatgttggag
                                                                     1620
aaaacaatca aggaggcaaa ccattaatta tgtatacatg tcatggactt gggggaaacc
                                                                     1680
agtactttga atactctgct caacatgaaa ttcggcacaa catccagaag gaattatgtc
                                                                     1740
ttcatgctgc tcaaggtctc gttcagctga aggcatgtac ctacaaaggt cacaagacag
                                                                     1800
ttgtcactgg agagcagata tgggagatcc agaaggatca acttctatac aatccattct
                                                                     1860
taaaaatgtg cctttcagca aatggagagc atccaagttt agtgtcatgc aacccatcag
                                                                     1920
atccactcca aaaatggata cttagccaaa atgattaagt gttccttaaa attaagttga
                                                                     1980
aaaaggaaat attetttete ataaaaetgt gaetaggeat acaetgtagt ttttgaaaat
                                                                     2040
tatgcaaaag cagctaaatg taacttattc caagtgca
                                                                     2078
```

```
<210> 6159
<211> 1835
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1474)...(1322)
<223> similar to gi496724 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6159
cataattttg gtgatatcaa tatcaactta acactacaat taggaaccaa tagtacttaa
                                                                     60
agagttcatg gcgcacagta agcgcttcat aaatattaac tattagcaga acaggaaaag
                                                                    120
gtgagagaaa actagcacgc agtattttct aatcctagtt ttgagactat tacacactta
                                                                    180
atcccttcct cataaatgta acccaaaaat aatctgtcat cattctatat aagacagatg
                                                                    240
tetteaetta ttgttaetta ggggaaatea aateataaee ttttaataag acacaagaaa
                                                                    300
aactetettt geactgattt ttattaaaca agtaaggetg gtagtggaac atatttttat
                                                                    360
ttaatgcata aacatataag tcccttatta gagaaactgt atatattgat gaatatggtc
                                                                    420
aatggtcaca tctatgggtt aattctttaa aaatcagaac caataattag gatagatttt
                                                                    480
atgetetett cattacattg tgaagtgtet tgtgtagtea tattetattg ttggaatgae
                                                                    540
agcttgtaca aatttcaaga aaataagaag atacatatga actccaagtt ctccccctcc
                                                                    600
ttctgcaaca gtctcaatga ttttcttcat cacctcagca tgcctgcatg ggtgaactga
                                                                    660
acacatggga ggtggtggca gatgagggtg attttcaatg gtcactgttt tcttcacatg
                                                                    720
atcctgactg atgtcttcat acatgtgctc aactgttaaa ggctgccgtt gctcatcata
                                                                    780
gccaaacaac cataatcgtg gagtctggta atatttatca taagtgatqt aaaqqtcata
                                                                    840
agttctggtt tgcaaaatag catcttcacc gccagcatca gttttggctt tacaagcttc
                                                                    900
tactattttc cttgtatcta gggtagcctc atctgtttcc aacaatccac tctcttcata
                                                                    960
ttetteeata tetgeagett eteetteate tteatettet teetetteac atagtgetga
                                                                   1020
gcaatcttga agccttatat tgtccttatt ttccagtgtg atctctttaa cqqcttccqt
                                                                   1080
tattcctgta atacctgtgt tgtgatatgt atctacccat ccgccatcac catcatcttc
                                                                   1140
ttcaatgata gcttccaatt catctgaata ttccatctgt ttgcaccgct tatagcacgg
                                                                   1200
cacatttttg gttaccaaaa attgtttgcc tgttggtagg tatgccttca ctttcaattc
                                                                   1260
ttcccctgta gcccattgcc atgttggaca gtggtggact aggtgatctc cagctgccac
                                                                   1320
aaactettet ggggtaatta cacetgttte ettaaaettt gatteettga ggaeeggggt
                                                                   1380
caggiactica gccaciticca gigoctitico citicacagia titaatcacat ictgcatect
                                                                   1440
ggggccggag tagcggccgg ccccgcgacg ggatggaaag tgcagccgtg tcaggggcca
                                                                   1500
gggagtcaga aaatgtcctc gctgccaccg actcgcatca gcacccggct ggcagcaccc
                                                                   1560
1620
gcgcgcgaag acggggtgcg cgatcctcgc accccaggca gcccgcgacg gaccqqaccc
                                                                   1680
agctgtcacc cagccgcgag ggagggcagc ggggccgaag ggagacctga ggtgagaagc
                                                                   1740
ggacgcacac gcacccctcg ccctttggga gctgtctgtc ctcgctttgc ttcactcgcg
                                                                   1800
cccttcgtgt tcccttcctt ctccgtgtgc cgaat
                                                                   1835
```

```
<210> 6160
<211> 2025
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (202)...(1350)
<223> similar to gi5360269 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6160
tccctagtcc atgtcgtgga attcggaaga ggcattgagg actttcctta cctgttttc 60
cagctcaccc actgccagca gaggatctgc tccgtcaccc aggctggagt gcagtggtgt 120
gatcacagct cactgcagcc tcaaactcct gggctcaacc agtcctctca cctcagcctc 180
ctgagtagcc gggattacag aatgctgtcc agtttcaacg agtggttttg gcaggacagg 240
```

```
300
 ttctggttac cacccaatgt cacgtggaca gagctagaag accgggatgg ccgtgtctac
 ccccacccc aggacttgtt ggcagccctg cccctggcgc tggtcctcct ggccatgcgc
                                                                     360
 cttgcctttg agagattcat tggcctgccc ctgagccggt ggctgggtgt gagggatcag
                                                                     420
 accaggagge aagtgaagee caacgecacg etggagaaac acttecteac ggaagggeac
                                                                     480
 aggeceaagg ageceeaget gteteteetg geegeeeagt gtggeeteae getgeageag
                                                                     540
 acccagegat ggttceggag acgceggaac caggategac cecagetgac caagaagttc
                                                                     600
                                                                     660
 tgtgaggeca getggaggtt tetettetae etgteeteet tegtgggegg eeteteggte
                                                                     720
 ctgtaccacg agtcatggct gtgggcacca gtaatgtgct gggacaggta cccaaaccag
 ctaaccttgt cctgtcctgc tgcagactct gaagccatcc ctgtactggt ggtacctctt
                                                                     780
                                                                     840
 ggagctgggt ttctacctct cactgctaat caggctgccc tttgatgtca agcgcaaggg
 tgggggacct tccagcatca agcctcgtcc ccactatgac ccaccgtcta ctgcaggatt
                                                                     900
                                                                     960
 teaaggagea ggtgataeac caettegtgg eggteateet gatgaeette teetaeagtg
 ccaacctgct gegeattggc tetetggtgc tgctgttaca tgattectct gactacctgc
                                                                    1020
 tggaggcctg taagatggtc aactacatgc agtatcagca agtgtgcgac gctctcttcc
                                                                    1080
 teatettete etttgtette ttetacacce gaetggteet ettteecace eagateetet
                                                                    1140
 acaccacata ctacgagtcc atcagcaaca ggggcccctt cttcggctac tacttcttca
                                                                    1200
 acgggettet gatgttgetg cagetgetge acgtgttetg gtettgeete attetgegea
                                                                    1260
 tgctctatag cttcatgaag aagggccaga tggagaagga cattcgtagt gatgtagaag
                                                                    1320
 aatcagactc cagtgaggag gcggcggcgg cccaggaacc tctgcagcta aagaacggga
                                                                    1380
 cagetggagg geecaggeea geececactg atggeeeteg gageegggtg geegggegte
                                                                    1440
 tgaccaacag gcacacaaca gccacatagc cgggcggggc tggctgtaag gggttgcccc
                                                                    1500
 1560
 ggagacaggg agggcccac ccggggtggg tgggaaggct gatgatctgt ctccagccc
                                                                    1620
 ttccttctgc ccacccaccc ttcttccctc tgggcaactg gacagatctg ggagccagca
                                                                    1680
getggatget gtggetggee agagacacet ecaggetgtg geetggggge tggggggage
                                                                    1740
 cccaggctga aaagggtcca attaaaacaa atggagccaa attttctgcc tgagaacttg
                                                                    1800
 ggtccctatc aaagttcctt cttcatcccc agagaccccc gagggagcca ggcctctgct
                                                                    1860
 tacatacccc acctacggga tacccactgc acttcagcct gggcaacaag agcaagactc
                                                                    1920
 catctaaagg aaaaagaaaa agaaaaaaaa aattcccaaa aagaaatggc caataagcac
                                                                    1980
 atgaaaagat attcaacatt gttagtcata aaaataatgc aaatc
                                                                    2025
```

```
<210> 6161
<211> 2088
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1758)...(931)
<223> similar to gi4884142 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6161
aaggtgtgga aatttcttt atttcccca aataaactct tctcccttat ggcatcatat 60
atgaatgatg agaaatccta aatttagttt attccataaa gtttaagaaa taggtcaggt 120
ttggcatctg tttatctcca ccaatccctt tgttaatcaa cacgttgtgg atgtgcaaat 180
gccagcaact gtttattta ggaaaacagg catggcaaag caatagtctt ttccctgggg 240
tcacaaactg agcatgtgac agagctgaaa acagcgaaaa aggtttactg tctgggagtc 300
ccattgggga ttctacttcc tcaacagagc ctcagggcat ctgattatt ataaagtact 360
ctgagtcata atgacttaat tgtgacttt atttaactag catgttcatg taactagaat 420
```

```
gcacctgtac atgaatttta aaatgtcata ctgtgctatt tttcttaatt ctgtaagggt
                                                                      480
                                                                      540
aacaagtaac tcagtaatga cttaaaactt gctatatatt ttcaatacta agataaaagt
                                                                     600
tttaaccaaa cttacaacag gcacattttg gcagttagtg taaacacaac attaacaagc
catatgccag aagatgtttg cttccaaggc cttagagaaa atgactgaac aagggcctac
                                                                      660
                                                                      720
atccaaacta atgetteece etteeceetg atttttgaca gttgacaget cateagtttt
                                                                      780
cttctcacac tggctttttt gattgcccat tggtaggaat ttcttccatt aacactgctg
                                                                      840
atagaagtgt cttactgtag gctcaccctt tgctctgccc ttctgaggtc cttctgcagc
                                                                      900
ttatcttttg tcacttctcc tttgtcaact gatctctagt ttgtccctca ggaataccaa
                                                                      960
ggagcgatct aagtgacttg atccgggcta agcaggcagg gaagaacagg tctgtttttc
                                                                     1020
cacccactcc ttaatcagtt ggtgggagat ggctaactta gggggcagcc agaatgggaa
agteceatte tgttgctgag tataggggee ctttctctte agggetgtgg ctacctcate
                                                                     1080
atgactgaac caggcagctg tetetaatte teteaagtte acetggattt etgtetgeee
                                                                     1140
tggtttcaca gttgcatggc aagcaatcat gagtgagcca ctagggaagg gccaatgctg
                                                                     1200
ggatgcatag tactgcaggc tttccacctc caatcccacc tcttctgcaa cttctcggcg
                                                                     1260
gatggtctct tccacacttt cacctatatc acaaaaacct gccaaggcag aatacattcc
                                                                     1320
cttgggaaag gagctttggc gggcaagcag gcatcgggtc ccatctgaca ccagcgtgat
                                                                     1380
cgccacagga gccatctgtg gataatagat tatattattg gaagggcaca cacgcttgct
                                                                     1440
gccagccacg ttccttcttg gtgggctgcc ccacttctgc ctgcaagaac tgaatgagca
                                                                     1500
tcatgcccag cggagaagag cttgagccgt ggacagcaag gaggcatccc ttgcattgaa
                                                                     1560
gttgaaagag tgcctttctc agctcaatga aagacccctt gagctctgtc tccatttcag
                                                                     1620
                                                                     1680
gtttgtgtaa ggaggcactt atggaaaagg agctatccag acctagatcc agagcaaacc
atgetteetg etgeteagag catecaatea geacagaate ttetattett tgtgcateet
                                                                     1740
gtccaaattt acccaggagc ctttccaact ctaagaaaca gaaaggggaa gggagaaaag
                                                                     1800
caaaacacaa gggtttctat taaatcacta cagccatatt agactcacag aaaatcatct
                                                                     1860
acttcaqctt aaaqtqqqta tacttqqctt ccaactqcaq ctaattaqct atgtaacctt
                                                                     1920
                                                                     1980
ggtctaacca tttaacctct ccaggcctgt tttctcatta gcagtctgag gactttagac
                                                                     2040
caaagaagga attettgtat aacattgtat tactetatgg etgtateatg aaaggaaaat
                                                                     2088
atcccctagt tagtaagatg catgacagtt aacttattaa gtcattga
```

```
<210> 6162
<211> 1008
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(328)
<223> similar to gi5070698 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6162
tttcgtgccg agaccggagg atgttccctg ctcaggagga ggccgacagg accgtgtttg
                                                                       60
ttgggaattt agaggeeega gttegggaag agattetgta egagetgtte etteagttte
                                                                      120
ttataggcgg ggccactaac caaagtgact atatgcaaag acagagaagg aaagccaaag
                                                                      180
tettttggat ttgtetgett taaacaccca gaateggtgt ettatgecat agetttgetg
                                                                      240
aatggaattc gtttatatgg aagaccaatt aacgtgcagt atcgatttgg gagttctcgc
                                                                      300
tettetgaac cagetaacca aagttttgag agetgtgtta agataaatte acacaactac
                                                                      360
aggaatgaag aaatggtggt gggcagatct tcctttccca tgcagtattt tccaattaat
                                                                      420
                                                                      480
aatacttctt tacctcaaga atattttctc tttcagaaga tgcagtggca tgtgtataat
                                                                      540
ccagtgctgc agetteetta ctatgaaatg acageteeac tteetaatag tgcateegtg
```

```
600
tcttcctcac tgaatcatgt tccagatctt gaggctggac ccagctcata taaatggact
                                                                      660
caccaacaac caagggactc tgacctttat cagatgacag ctccacttcc taatagtgca
tccgtgtctt cctcactgaa tcatgttcca gatcttgagg ctggacccag ctcatataaa
                                                                      720
tggactcacc aacaaccaag tgactctgac ctttatcaga tgaataaacg aaagagacaa
                                                                      780
                                                                      840
aagcaaacaa gtgatagtga tagtagcaca gacaacaaca gaggcaacga atgtagccaa
aagttccgaa agtctaagaa gaagaaaaga tactagtatt acctacaaat gaaacttacc
                                                                      900
                                                                      960
tacactgatc ttagttctct tatgaaaaaa ataagatgtt atcccatcaa ataaacaatg
                                                                     1008
tcatggctaa aaaaaaagtc gacgcagccg cgaatttagt agtagtag
```

```
<210> 6163
<211> 2134
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2012)...(1166)
<223> similar to gi5410284 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6163 gcacaacata gaataatgct gaatcacagt gagaatgtca ttccctttac agtttccttt 60 120 tatcctctga ctattccaga gacagtgcct catgctggtg ctggtaacat ctccctcact gccacaaaga aagagcctaa gattcggagc ctttctaggc attagtttct agctagaact 180 240 qaacaacatt ttttgtgttc atcttactta ttttgtggtt accttttatt tatggcaaac tgatactggt tttccacttg gagcaggatt catttttta aaaaaacttt aaaatttaaa 300 agataaatat taagaaaata atacaagtag tactaaagag actgaagttt gggaaacaac 360 420 ggctatagtc tgagtcatat tttttagacg tgatttcaaa agaaacaata aatgtggatt 480 agaaaggaaa catccattac tgtattttcg atacttgtga tgttccacag acgagctcat 540 cacagtette ttetacatea ggtgatttee agagttaaga tteaagcaaa aatataaaag 600 taaaaagaac caatttcaca ccatcttggg actttataaa ctcgtagtac cataaatgtg 660 caaataatct gaaatttatc cacagtcatt ttttttaaaa cataaacttt tccaatttct 720 gcagcttttt taatttggtc tatactaaat gcctcacaaa aggcaaactt caggttgtag 780 agttectect geettggtee teagageaat accaeateta ttttetgaae tetteaggaa ggattcagga ctgctgggcc aagacttcca atggcatatg actgttcttc cactgttatg 840 900 gccttgaaga gagaaatccc ctcctcctct gaatgatagt ctcatggcca acattcttct 960 gagaggactc ttcctagcag gtcttccatg ctcacaggca catcatgctg attttaaaaa aqqaaaqttq qagaqaaaga aagcagagct tctcctctgt ggggaacagc ttcttcatca 1020 cagtgcagtt atgatatgtt ccctccttat ccccctgaag ccaaggcaat agatctgaag 1080 gatggtgtca gacatcataa tegggageet tgeeetggge ttgeettage cagatetgta 1140 gtgtaacaaa tgctcccaca gtcacatgaa agaaaagctg ccagaggttg cgcagttcat 1200 agagatacat gttgcataga cagattaagc caaaagtcaa aaaagatttg acattccgcc 1260 agccggtgta gtagacaagt aaataacact ggtaaaggca ggctgctgtt ccaaggaaaa 1320 1380 atgcaatgat gtaattaaaa tcatcaccat cactctgcag gagactttct atagcatgaa 1440 agectegaat taaatteaga geteeacata aaagactaag gataaateet acaateeetg 1500 acagagttgc tggttccagt cgctggtgag cagaagaaat cttaccagca cctttacagt 1560 caacaqaaaa tgctgatgtg actccattgg ctgaccccag ttcgcacatg gaaatttgat 1620 aaggaggcct cagcttgatt tccgtctgca tgtcagaaag atttatcttt gttgaaagag acctgggatt attatatege tgcttggtcc tctgaatgaa gttatcaaat tcaatgaaac 1680 1740 agtatggtct gacagcagta tttgtcttca tcatgttata agtagtaatg aactccttct

```
gaagctcatc caggaaagag aaggcgagaa catttgggta attttcagtg cacaacatca 1800 tgtagctcac tcccagagag ctaataaaat taatgttata atgtccagtt ttcagtgtac 1860 atctatcagg aagttgagca agtttcctcg aaagcatttt aaaatacttt ctgcactcct 1920 gcattcctgt gctttgttca taatcagtag aagcagaaag tggcagtcca tctctgacac 1980 gaatgactga ggcagataaa atcatagaca tttcaaccaa cagagaagac ttggctcctg 2040 cccgtggggt aggtcttcag tcccgagggc gaaggccgag gctgtggcga gaggcaggga 2100 gcgggagggg agaggccggc agggattcga acga
```

```
<210> 6164
<211> 4393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (271)...(3214)
<223> similar to gi4240285 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6164 egeteegtaa ttteegggte gaegattteg tggegegget getggeegge ggetgageeg 60 ggagaaagga getgeggeea eegttegeee tacttetgeg eeteggggeg ggegeegeg 120 taaaaatggc gaaatggggg taggcggcgc tggacctgaa gagatggggc gcgcaggtgg 180 ggeggttgte agageceet gaegtgggeg eegggetttt ateggegatt tgatetggeg 240 acctegggce ggcgcctaag aggtcagact gcggagcctg cgggtcgcca gcggccccgc 300 cgagagccgg aggcaatgga tgaacagagc gtggagagca ttgctgaggt tttccgatgt 360 ttcatttgta tggagaaatt gcgggatgca cgcctgtgtc ctcattgctc caaactgtgt 420 tgtttcagct gtattaggcg ctggctgaca gagcagagag ctcaatgtcc tcattgccgt 480 gctccactcc agctacgaga actagtaaat tgtcgttggg cagaagaagt aacacaacag 540 cttgatactc ttcaactctg cagtctcacc aaacatgaag aaaatgaaaa ggacaaatgt 600 gaaaatcacc atgaaaaact tagtgtattt tgctggactt gtaagaagtg tatctgccat 660 cagtgtgcac tttggggagg aatgcatggc ggacatacct ttaaaccttt ggcagaaatt 720 tatgagcaac acgtcactaa agtgaatgaa gaggtagcca aacttcgtcg gcgtctcatg 780 gaactgatca gcttagttca agaagtggaa aggaatgtag aagctgtaag aaatgcaaaa 840 gatgagcgtg ttcgggaaat taggaatgca gtggagatga tgattgcacg gttagacaca 900 cagctgaaga ataagcttat aacactgatg ggtcagaaga catctctaac ccaagaaaca 960 gagettttgg aateettaet teaggaggtg gageaceagt tgeggtettg tagtaagagt 1020 gagttgatat ctaagagctc agagatcctt atgatgtttc agcaagttca tcggaagccc 1080 atggcatctt ttgttaccac tcctgttcca ccagacttta ccagtgaatt agtgccatct 1140 tacgattcag ctacttttgt tttagagaat ttcagcactt tgcgtcagag agcagatcct 1200 gtttacagtc cacctettca agtttcagga ctttgctgga ggttaaaagt ttacccagat 1260 ggaaatggag ttgtgcgagg ttactactta tctgtgtttc tggagctctc agctggcttg 1320 cctgaaactt ctaaatatga atatcgtgta gagatggttc accagtcctg taatgatcct 1380 acaaaaaata tcattcgaga atttgcatct gactttgaag ttggagaatg ctggggctat 1440 aatagatttt teegtttgga ettaetegea aatgaaggat aettgaatee acaaaatgat 1500 acagtgattt taaggtttca ggtacgttca ccaactttct ttcaaaaatc ccgggaccag 1560 cattggtaca ttactcagtt ggaagctgca cagactagtt atatccaaca aataaacaac 1620 cttaaagaga gacttactat tgagctgtct cgaactcaga agtcaagaga tttgtcacca 1680 ccagataacc atcttagccc ccaaaatgat gatgctctgg agacacgagc taagaagtct 1740 geatgetetg acatgettet egaaagggtg tecetaetea getteetgta agagaggeea 1800

```
aagaggatga agaagatgag gagaagattc agaatgaaga ttatcatcac gagctttcag
                                                                    1860
atggagatct ggatctggat cttgtttatg aggatgaagt aaatcagctc gatggcagca
                                                                   1920
                                                                    1980
gttcctctgc tagttccaca gcaacaagta atacagaaga aaatgatatt gatgaagaaa
ctatgtctgg agaaaatgat gtggaatata acaacatgga attagaagag ggagaactca
                                                                    2040
                                                                    2100
tggaagatgc agctgctgca ggacccgcag gtagtagcca tggttatgtg ggttccagta
                                                                   2160
gtagaatatc aagaagaaca catttatgct ccgctgctac cagtagttta ctagacattg
atccattaat tttaatacat ttgttggacc ttaaggaccg gagcagtata gaaaatttgt
                                                                   2220
ggggettaca geetegeeca cetgetteae ttetgeagee cacageatea tattetegaa
                                                                   2280
                                                                   2340
aagataaaga ccaaaggaag caacaggcaa tgtggcgagt gccctctgat ttaaagatgc
taaaaagact caaaactcaa atggccgaag ttcgatgtat gaaaactgat gtaaagaata
                                                                    2400
cactttcaga aataaaaagc agcagtgctg cttctggaga catgcagaca agcctttttt
                                                                   2460
ctgctgacca ggcagctctg gctgcatgtg gaactgaaaa ctctggcaga ttgcaggatt
                                                                   2520
tgggaatgga actcctggca aagtcatcag ttgccaattg ttacatacga aactccacaa
                                                                   2580
ataagaagag taattcgccc aagccagctc gatccagtgt agcaggtagt ctatcacttc
                                                                   2640
gaagagcagt ggaccetgga gaaaatagte gttcaaaggg agactgtcag actetgtetg
                                                                   2700
aaggeteece aggaagetet eagtetggga geaggeacag tteteecega geettgatae
                                                                   2760
atggcagtat cggtgatatt ctgccaaaaa ctgaagaccg gcagtgtaaa gctttggatt
                                                                   2820
cagatgctgt tgtggttgca gttttcagtg gcttgcctgc ggttgagaaa aggaggaaaa
                                                                   2880
tggtcacctt gggggctaat gctaaaggag gtcatctgga aggactgcag atgactgatt
                                                                   2940
tggaaaataa ttctgaaact ggagagttac agcctgtact acctgaagga gcttcagctg
                                                                   3000
cccctgaaga aggaatgagt agcgacagtg acattgaatg tgacactgag aatgaggagc
                                                                   3060
aggaagagca taccagtgtg ggcgggtttc acgactcctt catggtcatg acacagcccc
                                                                   3120
cggatgaaga tacacattcc agttttcctg atggtgaaca aataggccct gaagatctca
                                                                   3180
gcttcaatac agatgaaaat agtggaaggt aattgccaaa tcaagagaac tgacttgcaa
                                                                   3240
gctaccttga ccctgaattt tgctgtagtt ggtgctcaaa tttgtcatca gtcagataat
                                                                   3300
cagatttggt cttatttctt cattatctcg acctgaaata gtaatttgga aactgttgga
                                                                   3360
aggtggcaca gtttagtcta agacagcagt agtacatggg aaaaacagta tgggaagagt
                                                                   3420
tetttgtaat gtaaggaaat aacaatgtag ttetetatta atttagcaaa tttgtacatt
                                                                   3480
cacaaaaggc agtttgtcta ctacagcaga aggctggtta actgccagaa aatgtacctc
                                                                   3540
caggecetge atgeegteag taaccegeee ggeattggtg etetactgte tttggetaga
                                                                   3600
gcttagttgt gtttaaataa tcatctttat atttggggtt ttaattacag ttccattagt
                                                                   3660
gcctgtagat tagtgaacag aaaattgctt tggaagagat tctgccctgt agacactatg
                                                                   3720
tgaataactg aagtaacact agactgaatc teetttttgg agtatgtate tteteteact
                                                                   3780
tgttcaagta caggcacact gttcaaccgc atggtatctt tctgttgtgt gacttctaca
                                                                   3840
aatgtaattt taaatgaaat taagttaaca tggattcatt acqttcctqq ccctqtaqac
                                                                   3900
acgtgtaaga ttatttaaaa ttctttcatt tttttctgcc tcttactata cgactgtagt
                                                                   3960
gcaacaaata ttttaaagcc cccttttctt ctttattttc attagttgta cattgatttc
                                                                   4020
agtgtcaaca catttaaaga ttcattcatg ttgcacagtg gcttacatga acgtgaaact
                                                                   4080
gtgatataag gttttctttc atactcataa ttagcccaaa acagttgcca aactttgcca
                                                                   4140
ttgtgctcct gcatttgtgt ttgagctgct atatatttgt ggaaattaca ctgaaagttg
                                                                   4200
4260
gctgtatttt acttagtgaa tattgttcac tcttccgtgt ctgatgtctt gctgaatgct
                                                                   4320
gtgactcata gtttactttt gttcaaaata gtttgcactt tttgttaata aaatcaactt
                                                                   4380
gagaaaaaaa aaa
                                                                   4393
```

```
<210> 6165
<211> 3469
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (56)...(1359)
```

<400> 6165 aatttacccc tgacgcggcg gcggccgacg ggaagctgtg tgtgcttagg tcgtggtggc 60 cocggtggtg gtgggctccg ggcgggctcg cgtcatcctg cccccgctgc gatgcatccg 120 eggegeeegg aeggatttga tggettggge taeeggggtg gtgeeeggga egageaggge 180 tttggcggcg ccttccctgc aaggtccttc agcaccgggt cggacctggg ccactgggtg 240 acgactecce cagatatece eggeageege aacetgeact ggggegagaa gageeegeee 300 tacggcgtgc ccaccacctc caccccgtac gaaggcccca cggaggaacc cttttccagt 360 ggcggcggcg gcagtgtgca ggggcagagc agtgaacagc tgaatagatt tgctggattt 420 ggtattggac ttgcaagtct ctttacagaa aatgtattgg cacatccttg cattgttcta 480 cgccgccaat gtcaggttaa ttaccatgct ctagcattac catctcactc catttacagt 540 catcaatatt atgtacagtt tcaacaaaac tcagggacct agagccctgt ggaaaggaat 600 gggaagtaca tttattgtcc agggagtcac acttggagca gaaggcataa ttagtqaatt 660 tacacctttg ccaagggagg ttttacataa atggagtcct aaacaaatag gagaacacct 720 tetactgaaa teectaactt acgtggtgge aatgeetttt tatteageaa gtetgattga 780 aacagtgcag agtgagataa ttcgagataa tactggcatt ttggagtgtg ttaaagaagg 840 aattggaaga gtgataggca tggqaqtqcc tcatagcaaa cqacttcttc cqcttctttc 900 cttgatcttc cctacggtgc ttcatggagt tcttcattac atcatcagct cagttattca 960 gaagtttgtc ctactaattc taaagagaaa gacttacaat agccacctag ctgagagcac 1020 tagecetgtg cagagtatgt tggatgetta ttttccagaa ettattqcta aetttqctqc 1080 cagtetttgt tetgaegtta taetttaece attggaaaca gttttgcaec geetteacat 1140 tcaaggaaca cgcacaataa ttgacaatac agaccttggc tatgaagtgc ttccaattaa 1200 tacacaatat gagggaatga gagactgtat caataccata aggcaggagg aaggagtgtt 1260 tggtttttat aaagggtttg gtgctgttat aatacagtac acactgcatg cagctgtttt 1320 acagattacc aaaattattt actctacact tcttcaaaat aacatttgag atttaggttc 1380 cttcactgag tagtctggaa gatataatct ggataatttg ctatgaaqtt atqaqqqata 1440 aaagtgaaat actggggaag aaaatggatt ggaaagtaaa attggtacta aaqcccatac 1500 tgattatctt gactttgttt tttaaggcat aggtatatat tttggatcaa aatccttcca 1560 aatttgaaaa ctcaataaaa ataacactta ttaaattcta gttagtgtag cactcatgct 1620 gaagtaaaca tgatcgtagg caqaaqcaaa attttattat aaaatctaaa acaaaacttt 1680 atagagttga atctattcca tctgacttca atatttgcca aacgtttatt ttacctccta 1740 gattgatgtt ggtatagtat ccttaataca gtgtagtata ttaatgtcct taatacaatc 1800 aggaggtttt tacctttaag caaataaatt atgtcattat tgaaaaagac ttaagggatg 1860 attagacttg gcaatctgta agcaggagta taaatgtttt aaattgcatt gtccctatgt 1920 aactatctta atggctatat atatgtattt tataaagcca tttatgtata cacatgtaac 1980 ttggaatttc cttcatccct acacattttc tacacttaca tcaccttatt qcataaaaca 2040 aagtcacgcg ctttctgctt gaacatcaaa atatcaaaaa ccaaggtacc caaaagatac 2100 aagtcagaga caacatcctt gtccatatcc aaacccagtg tttcagtgct agcaacttaa 2160 tttctcatac atttatagag tttggtttgc tttgctagtt gtgtgaatca ttgggctgtt 2220 tttagagcca ctgttaagag agaatataaa ataatcatga caattactac tgtttccaca 2280 tttacaaatt gtgtacttaa atgaacctca tttccctttt atttctgaat ggcttgtctg 2340 agaggaaaca aaattaaaat tcatctggga atttgtgcct cttgtctagt atatagtcac 2400 cactaaataa tggcttccgt ttttattttc tttcaggttt tgctttaaat tttqttttcc 2460 aaaatagatg tacgtggagg gaaaagcaat tattettate acettttatt taaaettett 2520 tagatgaata ctgaagaaaa atccaaacct taaaggaaat gtgcccttqt attttatqqq 2580 tgaggggaaa aagtacattt gtacatttca acatataata agcaaaaaaa ttactaatca 2640 gtttaataaa aacattttgt ctattcctaa atgtaatttg gtgggttaag cactttgtgt 2700 agtaaaatga tatgtgtctg ctctatcatt agacatttta aagtttcatg tcttcacgtg 2760 aataatcaca gttgtatcat gaaccattta gcgctctgaa gcacagtgac tttgcactga 2820 tattgtccaa ccaagaatgc atacgaatag aaattcattt tacttgctaa atgtcacaga 2880 aatggttact ttttgcaaat agtagtgttg gaacaaaaaa gtgatatcca aaaagtgtaa 2940 aaacagtaat aagtagcaaa tetetegtgt gtgtgtgtgt gtagttactg aaacacetac 3000

```
3060
attttccatt tttaaattcc accaaaaggg ggaaaataaa attaaacacc actgatcaca
ttttatattt tatggtgact attttagatt aaggtttact ttgtccaacc aatagcattt
                                                                     3120
                                                                     3180
aaattgtttt caattaggat agtttcagat aagagtaaac cagaaaattt caagtttgaa
aaatttctag aaaagaatct gaatagaatc aagtatttac tagtgaaaat ctgtaggatc
                                                                     3240
ctttgtttag ctaaaaatta aatatttcag gatatttttt ggaagttagc atgaaaatag
                                                                     3300
ttagttacat aaattcattt tattgtagaa taattataag accgataggc tgaaccatac
                                                                     3360
acaaataagg ttgatcttgt tttccttttt ggagaaagag aatacaaatt aacattaaaa
                                                                     3420
ttgaaatgta gaaagtaaaa tatgaataat tttttacaac cactacaaa
                                                                     3469
```

```
<210> 6166
<211> 4206
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3783)...(1144)
<223> similar to gi5911907 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6166 ttttttttt ttaaagcaaa taaaacattt attgttcaga ttttttttca ttttcttcct 60 ttttacaaaa acatgcatac atacacaggg tatggtgggt cctaggaaag acacacacac 120 acgesteast casacacacg steasacaca egesteasts acacacatge teasacacat 180 tttccttctt gaccccaggc ctggaccccc aaaagccttg aagactttgc cagagcaggc 240 etecectect ceatgtetgt atettetete ceaeceette ececteagte agggetatte 300 ctatgtgggg ggtggggaat cagagctatg gtggggggag gccccaggaa acagaggaag 360 ggeteeeega gtggggeagt ggeegagggg gteeeagggg tatgetgege ttetggggga 420 gatgaagggt ttggcaccat tggatcagga agcacaggac tcccagagca cccatctgct 480 ccaccagggc atcgccagga ggttgatgta ggggggcctc tggcgagggt acggaccaga 540 tggagggetg ccagtetegg etgteaggga gettegtete agtgeecagt ggtagaggga 600 agettecaga gtegtetgag gaageaggtg agagggaeta eeeetgeaet caggaatatg 660 ggacctettg geteceeact ecceectage ecctagagee taggaaggge cageetgtet 720 gaggccaagt tcacatttct gtgtggagcc tgaggctgtg tgcaaagtct ggggtttgca 780 gagccaggaa tagtggttaa gggtgagccc gacggagccg gagccagtcc tcctctgtgc 840 agtectgagg aatgggggee acagecaggg cecatactgg aggggagaat etgttetega 900 gagecetgtg ggggtegeeg eccagecegt etecteteag ggteetetee agtteecatt 960 ctagacccag ggattttctc acgctccctg ggataactgt caaagcaggc aggctgttct 1020 etggttecaa etaettgeee acaggatete taaagaceea ggaatggggg etattgeeag 1080 gggtttagaa gagaaccacg gtcccaaggg catggtgggc gggcagatgg ttccagagcc 1140 ttagagattc ataggttctt cctcctccac cagetgctcc gagggcctat cttcagccag 1200 gatgcccaca gagagggacg ccagtgcggt tactgcctcc acttcttctt tgtcagcccc 1260 tggcactcta ggcacccagg agtctggaca ggaggccagg cgctgcatgc agccccagta 1320 tttactgtgc acceggatca egggeeteca gagageggat ggeattgagg ttgggtttet 1380 gtttccagcc ttcttctgaa aggggatcca ccctgttacc cagaagagca gccacacagg 1440 cctcagaggc gtcacagatg gctgtgaggt catggccacc ctccaaggcc agcaccactg 1500 cgcctcctgc caggttcatc agttgctgcg tcatgtatcc aaaacatttg gcagaaacat 1560 ggtagecace cagtggggee gggtgaceet cageageate aaatecagea gacaceagga 1620 ctaggtctgg agagaactct cgggcgatgg gcatcacgac tatcctgaaa gcagccaggt 1680 actcaggatc ccccatgggg gggtccagac ctccagccca ggccacattg acattgaagc 1740

```
1800
cetcaceget gecagecect acetcateca cagececaet eccegggaag aagttgeegt
cgtcatggcg atgcagggag atgtagagca cactggggtc ttggtagaag gtttgctggg
                                                                     1860
tgccgttgcc atggtgcacg tcccagtcta caatgaggat cttgctggcc ttgctctgct
                                                                     1920
                                                                     1980
gttgcagctg ccggcaggcg atggccactg agttgaagaa gcagaagccc atggctgttg
                                                                     2040
aatgatetge atggtgteet gggggeegea ceacagegaa accattettt ageteacgag
aagccacttt gaaggcgagg tcagtgacac tgccagcggc ccagcgggct gcattggagg
                                                                     2100
                                                                     2160
aatgaagete attecagatg gtgtcagtgt ccaccccaac cccaccacag ggcagcatca
caaacatccg ctgtgccagg agccctgcca gcttcccgtt gtccagtttg aggcggctga
                                                                     2220
gegggttggt geegtagagg ageaegtgee geteagagtg gaetgaetge agetetteea
                                                                     2280
gggaggcett ceggeetegg agacaeteae aetggeteeg gageeeeege teetgeagee
                                                                     2340
                                                                     2400
gggaccagat getetggatg eggeeggegt geteegggtg cetgetgttg teacegeagg
                                                                     2460
agcactggtg cttcagcatg accgagtcat agatcagccc tgtggtgaag ggcagggtcc
                                                                     2520
tggcaggggt ctctgagctg gagaggactc gggcctggct ggcaggctct ggggctgaca
gtgaggcagg tgcggctggg gaagactgag cccgggacag aggccggtgc ccaccctggg
                                                                     2580
ccagaggaag cagcacagtg tccccggtgc tgccccgggg gagccgccca gccagtcgct
                                                                     2640
gctgttccca gagcaacacc tgagggtgct gctggagagg agcggggcct ctggcctcag
                                                                     2700
getgeecatg geceagetee etgtgeteea ggeeategte caecacetgg eeeggteeee
                                                                     2760
cgccatctgt ctccaggtct tcagccgagg gtatctgccg cagccggggc ttctcactcg
                                                                     2820
gettggetga eetettgate aeetggaegt gagttttgag etgeteeagg eggggetgea
                                                                     2880
                                                                     2940
tgggggcccgg cggtggggga gcggtggcac tggggggcag gggctctgag cgagtccggc
tcagtggcca gtggaggcct gacccagaga gccgctcggt ggtcattaag gactgggcaa
                                                                     3000
agtggaaggg caagggccca agcccgggca cagtcagcag cggggcatga gagcctgagg
                                                                     3060
ggtccaggag gagaatgggc tgcaggcgag agggcaaggt gcccccagcc tcgggctcca
                                                                     3120
agccatgggg caggaagagg ggagtgtggg ggctccccag gattggcccc cgagggccca
                                                                     3180
gagteggatg ggteetgegg teactgteag ceetggeagg ggegggeage eecagagtga
                                                                     3240
                                                                     3300
ttgcgggcag caaggacact gtcggcaagg cgaacggggc cacagaagtc tcctgcagcc
geageegetg geceaagage geeteegage ceaggatggg attggggeeg tgetegetgt
                                                                     3360
cattggggga gctgcatcct gatgcgggcg tgctgctact acttggggag gagtctccga
                                                                     3420
gggtctctgc gggccgccgc cggaggctgg ggggcgcact ctcctttcgg agcagtggat
                                                                     3480
tetteeteeg etecagggae ttettggget tatagegeag etteaggttg ggeteagaga
                                                                     3540
ctgtcttgcg cagagggaag tgctctgggg ggtcactggg caggctggga acaggaggca
                                                                     3600
aaaagctgct gagcatggag cgggtggctc cttccgtctc caggggctcc agggttctgt
                                                                     3660
agggaatgcc ggggctgttg ggatggactg ttctttctag ggccgcctgc tgttttttca
                                                                     3720
gaatcacctc cgctagcttc tgcttgacca cgctgctggc tacagcactt cgcttgctct
                                                                     3780
tgtccttgtg gagaagctgc cgcagctctt gttcctgggg agcctcctgc aactcgggca
                                                                     3840
teggegtgte catggagage tgtgggeagg geeggeagee cagaaaggga caaggagttg
                                                                     3900
aggactgaga ctggtgtcta gggatgctga aggcggggag gctggggacc aagctcaagg
                                                                     3960
tggccccaca tgcagggagc tccatcttta ccctcatggg ctccaccgag cgctgctgct
                                                                     4020
gcaggcctgc taggaagagg tggtggtgca ggcgctgggg acgctgcagg gccagcaatg
                                                                     4080
tgggctctgg tgggggctcc actgggggcc gctggcccac ccgcaggtcc atgggctgcg
                                                                     4140
gctgagggcc tggtgtgtct gcacagggcc tggggcagcc tagggacaga gagacggacg
                                                                     4200
cgtggg
                                                                     4206
```

```
<210> 6167
<211> 4968
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (227)...(3666)
<223> similar to gi34276 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6167 60 ctgacttaga acaacttttt tgacttcctg cagggaggac ccttacagta tttttggaga agttagtaaa accgaatctg acatcatcac ctagcagttc atgcagctag caagtggttt 120 180 gttcttaggg taacagagga ggaaattgtt cctcgtctga taagacaaca gtggagaaag 240 gacgcatgct gtttcttagg gacacggctg acttccagat atgaccatgt atttgtggct 300 taaactettg geatttgget ttgeetttet ggacacagaa gtatttgtga cagggeaaag cccaacacct tcccccactg atgcctacct taatgcctct gaaacaacca ctctgagccc 360 ttctggaagc gctgtcattt caaccacaac aatagctact actccatcta agccaacatg 420 tgatgaaaaa tatgcaaaca tcactgtgga ttacttatat aacaaggaaa ctaaattatt 480 540 tacagcaaag ctaaatgtta atgagaatgt ggaatgtgga aacaatactt gcacaaacaa tgaggtgcat aaccttacag aatgtaaaaa tgcgtctgtt tccatatctc ataattcatg 600 tactgctcct gataagacat taatattaga tgtgccacca ggggttgaaa aagttccagt 660 tcattgttgt tcgccaagtt gaacaaccag atagtactat ttggttaaaa tggaaaaata 720 ttgaaacctc tacttgtgat acacagaata ttacctacag atttcagtgt ggtaatatga 780 840 tatttgataa taaagaaatt aaattagaaa accttgaacc cgaacatgag tataagtgtg actcagaaat actctataat agccacaagt ttactaacgc aagtaaaatt attaaaacag 900 attttgggag tccaggagag cctcagatta ttttttgtag aagtgaagct gcacatcaag 960 gagtaattac ctggaatccc cctcaaagat catttcataa ttttaccctc tgttatataa 1020 aagagacaga aaaagattgc ctcaatctgg ataaaaacct gatcaaatat gatttgcaaa 1080 atttaaaacc ttatacgaaa tatgttttat cattacatgc ctacatcatt gcaaaagtgc 1140 aacgtaatgg aagtgctgca atgtgtcatt tcacaactaa aagtgctcct ccaagccagg 1200 totggaacat gactgtotco atgacatoag ataatagtat gcatgtoaag tgtaggootc 1260 ccagggaccg taatggcccc catgaacgtt accatttgga agttgaagct ggaaatactc 1320 tggttagaaa tgagtcgcat aagaattgcg atttccgtgt aaaagatctt caatattcaa 1380 cagactacac ttttaaggcc tattttcaca atggagacta tcctggagaa ccctttattt 1440 tacatcattc aacatcttat aattctaagg cactgatagc atttctggca tttctgatta 1500 ttgtgacatc aatagccctg cttgttgttc tctacaaaat ctatgatcta cataagaaaa 1560 gatcctgcaa tttagatgaa cagcaggagc ttgttgaaag ggatgatgaa aaacaactga 1620 tgaatgtgga gccaatccat gcagatattt tgttggaaac ttataagagg aagattgctg 1680 atgaaggaag acttttctg gctgaatttc agagcatccc gcgggtgttc agcaagtttc 1740 ctataaagga agctcgaaag ccctttaacc agaataaaaa ccgttatgtt gacattcttc 1800 cttatgatta taaccgtgtt gaactctctg agataaacgg agatgcaggg tcaaactaca 1860 taaatgccag ctatattgat ggtttcaaag aacccaggaa atacattgct gcacaaggtc 1920 ccagggatga aactgttgat gatttctgga ggatgatttg ggaacagaaa gccacagtta 1980 ttgtcatggt cactcgatgt gaagaaggaa acaggaacaa gtgtgcagaa tactggccgt 2040 caatggaaga gggcactcgg gcttttggag agtgttgttg taaagatcta accaagcaca 2100 aaagatgtcc tagattacat cattcagaaa ttgaacattg taaataaaaa agaaaaagca 2160 actggaagag aggtgactca cattcagttc accagctggc cagaccacgg ggtgcctgag 2220 gatecteact tgeteeteaa actgagaagg agagtgaatg cetteageaa tttetteagt 2280 ggtcccattg tggtgcactg cagtgctggt gttgggcgca caggaaccta tatcggaatt 2340 gatgccatgc tagaaggcct ggaagccgag aacaaagtgg atgtttatgg ttatgttgtc 2400 aagctaaggc gacagagatg cctgatggtt caagtagagg cccagtacat cttgatccat 2460 caggetttgg tggaatacaa teagtttgga gaaacagaag tgaatttgte tgaattacat 2520 ccatatctac ataacatgaa gaaaagggat ccacccagtg agccgtctcc actagaggct 2580 gaattccaga gacttccttc atataggagc tggaggacac agcacattgg aaatcaagaa 2640 ggaaaataaa agtaaaaaca ggaattctaa tgtcatccca tatgactata acagagtgcc 2700 acttaaacat gagctggaaa tgagtaaaga gagtgagcat gattcagatg aatcctctga 2760 tgatgacagt gattcagagg aaccaagcaa atacatcaat gcatctttta taatgagcta 2820 ctggaaacct tgaagtgatg attgctgctc agggaccact gaaggagacc attggtgact 2880 tttggcagat gatcttccaa agaaaagtca aagttattgt tatgctgaca gaactgaaac 2940 atggagacca ggaaatctgt gctcagtact ggggagaagg aaagcaaaca tatggagata 3000 ttgaagttga cctgaaagac acagacaaat cttcaactta tacccttcgt gtctttgaac 3060 tgagacattc caagaggaaa gactctcgaa ctgtgtacca gtaccaatat acaaactgga 3120

```
gtgtggagca gcttcctgca gaacccaagg aattaatctc tatgattcag gtcgtcaaac
                                                                  3180
aaaaacttcc ccagaagaat tcctctgaag ggaacaagca tcacaagagt acacctctac
                                                                  3240
tcattcactg cagggatgga tctcagcaaa cgggaatatt ttgtgctttg ttaaatctct
                                                                  3300
tagaaagtgc ggaaacagaa gaggtagtgg atatttttca agtggtaaaa gctctacgca
                                                                  3360
aagctaggcc aggcatggtt tccacattcg agcaatatca attcctatat gacgtcattg
                                                                  3420
ccagcaccta ccctgctcag aatggacaag taaagaaaaa caaccatcaa qaaqataaaa
                                                                  3480
ttgaatttga taatgaagtg gacaaagtaa agcaggatgc taattgtgtt aatccacttg
                                                                  3540
gtgccccaga aaagctccct gaagcaaagg aacaggctga aggttctgaa cccacqaqtq
                                                                  3600
gcactgaggg gccagaacat tctgtcaatg gtcctgcaag tccagcttta aatcaaggtt
                                                                  3660
cataggaaaa gacataaatg aggaaactcc aaacctcctg ttagctgtta tttctatttt
                                                                  3720
tgtagaagta ggaagtgaaa ataggtatac agtggattaa ttaaatgcag cgaaccaata
                                                                  3780
tttgtagaag ggttatattt tactactgtg gaaaaatatt taagatagtt ttgccagaac
                                                                  3840
agtttgtaca gacgtatgct tattttaaaa ttttatctct tattcagtaa aaaacaactt
                                                                  3900
ctttgtaatc gttatgtgtg tatatgtatg tgtgtatggg tgtgtgtttg tgtgagagac
                                                                  3960
agagaaagag agagaattct ttcaagtgaa tctaaaagct tttgcttttc ctttgttttt
                                                                  4020
atgaagaaaa aatacatttt atattagaag tgttaactta gcttgaagga tctgttttta
                                                                  4080
aaaatcataa actgtgtgca gactcaataa aatcatgtac atttctgaaa tgacctcaag
                                                                  4140
atgtcctcct tgttctactc atatatatct atcttatata gtttactatt ttacttctag
                                                                  4200
agatagtaca taaaggtggt atgtqtqtqt atgctactac aaaaaagttg ttaactaaat
                                                                  4260
taacattggg aaatcttata ttccatatat tagcatttag tccaatgtct ttttaagctt
                                                                  4320
atttaattaa aaaatttcca gtgagcttat catgctgtct ttacatgggg ttttcaattt
                                                                  4380
tgcatgctcg attattccct gtacaatatt taaaatttat tgcttgatac ttttgacaac
                                                                  4440
aaattaggtt ttgtacaatt gaacttaaat aaatgtcatt aaaataaata aatgcaatat
                                                                  4500
gtattaatat tcattgtata aaaatagaag aatacaaaca tatttgttaa atatttacat
                                                                  4560
atgaaattta atatagctat ttttatggaa tttttcattq atatqaaaaa tatqatattq
                                                                  4620
catatgcata gttcccatgt taaatcccat tcataacttt cattaaagca tttactttga
                                                                  4680
atttctccaa tgcttagaat gtttttacca ggaatggatg tcgctaatca taataaaatt
                                                                  4740
caaccattat ttttttcttg tttataatac attgtgttat atgttcaaat atgaaatgtg
                                                                  4800
tatgcaccta ttgaaatatg tttaatgcat ttattaacat ttgcaggaca cttttacagg
                                                                  4860
4920
tggtattttt catgaagtaa taaaaactcg ttttggtgaa aaaaaaaa
                                                                  4968
```

```
<210> 6168
<211> 2150
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (515)...(0)
<223> similar to gi527580 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6168

gggggccca aaaaaaaaa tattttttc catcccggg gaggtaagtt tgatccttta 60
gaacggccgc ccctttttt ttttttatc aacacattca ctaagatcta atttgtcttt 120
ttctgactta tgctcatgtt ttatcttctt ttcttttca aaggttttc tttccatctt 180
ctcaatgtcc ttttcttaa tttgagatcg cttctcaggt ttttctttac tttccttat 240
atgctttct tgttttcaa tgtctattc ctttccact aaatgaagcc ctatagatc 300
ctcaatggca ctcataccca aagaagtaaa ttctgagtct ttatctgtgg gtatgtttc 360
```

```
tetetetet tttagatett ttatttttte etecetaaaa gatttetege ttteetttt
                                                                      420
aatcttgtct cgttcctctt taaagttcct ctcttttgac acatgctttt ccttggttga
                                                                      480
                                                                      540
tttatcatct ttgatgtttt tttccaattt aaaaaagctt ttcagacccg aaggccattt
aatacagtaa atcttacttg ggtagtttag caaacatttt ttaaaaccca catccaacag
                                                                      600
attggttagt attagataca cagatttggt ttcaaagctg aaatacccct ggtggaataa
                                                                      660
                                                                      720
atcttctcat gaaattcagt tatattatgc cacaaaacag ggacacttat ctattgacaa
cttaaatatt aactcagtgg ggctacctgg gtgatataaa taggggaaaa aaccagtggg
                                                                      780
tcatgggatt tagggagtga ggaaggacta tggacaccag ccttaccttg gacttgggga
                                                                      840
cccgcaaagg atgttaaaaa tctatcctag aatttaaaac aggaaaaatg tccaatattc
                                                                      900
cactececat teggeceaaa ceatececea aggaatacae eeccacecea eeccacatg
                                                                      960
aggtttacta accagctgct acagatgtta ctatgtcact aattaacaat gatcacagaa
                                                                     1020
aatgtgtcat accagagttt ttgttatcat acacaatgca ttagtggctg caggaatctt
                                                                     1080
cetteaaaag etacegteag aaggeaaact gacaaatgte catgeegetg gtecaagaaa
                                                                     1140
ccacagetaa gagecatgag geatteattt gtacattgag etetetetgg catgeteece
                                                                     1200
actctagtta gaggggctgg ggtatggaga gaccgtccca gccgggcgct gcagcctcct
                                                                     1260
actectggge etecttgegg gteaacttgt agateteagt gggteegtee acatgggtga
                                                                     1320
tagtggtggt gagctggagt tcttccccac tatggacacc cagatcgcca ttggactggt
                                                                     1380
cttctccata gtttttatgg gatggtgcat acaagaacat cagagcaaag acatacagat
                                                                     1440
tecacatece atagatgeet gtgaaaaagg caetgtteae ttggaetgtg atgeegeeee
                                                                     1500
atttccaatg gccttccgtt acctgactaa cgatgaagaa gatgacagtc atggcagcgc
                                                                     1560
aggccaaggt gataagcatg aggaacttga acctaaaaat tagcccctca tagtgtagcc
                                                                     1620
gccggacttt gctcatagct ggcaggctgg actgcttccc actgatgttc cgaaacacct
                                                                     1680
gaaataccat gaagcataga aacaggaagt agaggcagag gcagattcca gccacgatga
                                                                     1740
tgaaggccat ggccagctct gttccaatgt ctgtagtcca gatactgtag aagggattcg
                                                                     1800
tgagttgtac ccctctctca cacatgtcaa atatgaagag gcagaaggag ccaacggcaa
                                                                     1860
tgggtccgac ttgcttccaa taccctgcga tgtggttccg ctcgtgctga tccatcatgt
                                                                     1920
getegecaca gaagatgate cagaaggaca gaagcatege atagaagatg ceetgtegga
                                                                     1980
tgtcaccaaa cagcagcatc caggtccagt caaacccgat ggaaaaccat tccactggga
                                                                     2040
tattgataaa ggtcatggaa atcccaaggg caaagatgac tttttccaga agcactgggg
                                                                     2100
gtcgggacat catggtgatc ctcctccaat accacaccat aatgatgaag
                                                                     2150
```

```
<210> 6169
<211> 1384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1248)...(630)
<223> similar to gi2338292 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6169

ttatttcgca gttcatttca ttattattt ttgcattatt tctgcttttt ttggtctcct 60

ttccgaaggg tttttattta ggggaacagc tcaactccag ctccctgggt gcaatgcgag 120

cctgcccgca ccgagcgcg ttgcaaatat gccccccgcc ctttccctgg gttacgaagt 180

gcccctgtac cgcacgggga gtgcacgaag acacgcgtgt gcacaggcgg ggctctgcgt 240

gtgcgtaccc tgtgggcact ggaggggct gtcaggtcat atctgccat acacaagatg 300

ggcacagccg gggctggggc ttcctggggt ccgaatttcc ccgcggcgtc tgcctaccac 360

gggggcggaa ctgaccagtg ccctcacggt caggagagtg tgggggcccg tgaggggca 420
```

```
ggacacggga acacgttgcc gaaaacatgt gtatatccat acgcggcgga aacgcgtgtg
                                                                      480
ccagggcagg cctcgggccg gatgacccct actcccacca ttccccactc caagtccagc
                                                                      540
tteggegtet atgaggeeta geggetteeg gaateeggta tgaateaggg geaeggtteg
                                                                      600
                                                                      660
gagageeggg tetegaaage agetetteag tgaggeetee tgaggetggt gtaggggggt
                                                                      720
ggaggtgcgt cgtgtacccc agaggctgcc agcgcctgct cataggtggg gaggcctggg
                                                                      780
ggtgggattg ggactggagg caggggggtc ggtgggccca gagggttcaa aggactcaga
gggctaatga gcccggcctc ttggggaaca gggctgctgg cctcggtcgt gtcgccagcg
                                                                      840
cagataccaa aaaggctccc caggccggcc caggaacaaa tgagcaggat gccacctgtc
                                                                      900
                                                                      960
agccccacag ccaggctggc cacatccact cgtccacgcc ctccctttgc cattgtagat
gtagetetee caaaageget eegtgagagt gttgteetea aaataeteee tggeetette
                                                                     1020
ccaggaacac ctctctcca gacactcccg tctccaggtt cccctggtgt gagcagctcc
                                                                     1080
caggtcccag tggttggctc ttggaatccg ggtatggcta ctcaggaagc tctgggcctc
                                                                     1140
tgggggaccc aggaagactt cttggtctgt ctcctcactg ggtgaagtat ccaggcaggt
                                                                     1200
ggttaatgcc atatatagca gcagcagaga ggggtggccc ctcatatttt ccagacacct
                                                                     1260
gcccagaaat gtgagcactg ccccttcctc tttaatcgag aactccttgg ccagctacag
                                                                     1320
ccaggtttcc ggagagagaa agagaagaga ggacttgagc aagccaggcg aggcacttcc
                                                                     1380
gcaa
                                                                     1384
```

```
<210> 6170
<211> 2142
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (275)...(1688)
<223> similar to gi1653342 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6170
ggggcgtgca gcagagtgcg ttcctcgtct gccagccgtt ttggctagcg cgcggcgcc
                                                                       60
gtggctaagg ctgctacgaa gcgagcttgg gaggagcagc ggcctgcggg gcagaggagc
                                                                      120
atcccgtcta ccaggtccca agcggcgtgg cccgcgggtc atggccaaag gagaaggcgc
                                                                      180
cgagagcggc tccgcggcgg ggctgctacc caccagcatc ctccaaagca ctgaacgccc
                                                                      240
ggcccaggtg aagaaagaac cgaaaaagaa gaaacaacag ttgtctgttt gcaacaagct
                                                                      300
ttgctatgca cttgggggag ccccctacca ggtgacgggc tgtgccctgg gtttcttcct
                                                                      360
teagatetae etattggatg tggeteaggt gggeeettte tetgeeteea teateetgtt
                                                                      420
tgtgggccga gcctgggatg ccatcacaga ccccctggtg ggcctctgca tcagcaaatc
                                                                      480
eccetggace tgeetgggte geettatgee etggateate ttetecaege ecctggeegt
                                                                      540
cattgcctac ttcctcatct ggttcgtgcc cgacttccca cacggccaga cctattggta
                                                                      600
cctgcttttc tattgcctct ttgaaacaat ggtcacgtgt ttccatgttc cctactcggc
                                                                      660
teteaceatg tteateagea eegageagae tgagegggat tetgeeaceg cetateggat
                                                                      720
gactgtggaa gtgctgggca cagtgctggg cacggcgatc cagggacaaa tcgtgggcca
                                                                      780
agcagacacg ccttgtttcc aggacctcaa tagctctaca gtagcttcac aaagtgccaa
                                                                      840
ccatacacat ggcaccacct cacacaggga aacgcaaaag gcatacctgc tggcagcggg
                                                                      900
ggtcattgtc tgtatctata taatctgtgc tgtcatcctg atcctgggcg tgcgggagca
                                                                      960
gagagaaccc tatgaagccc agcagtctga gccaatcgcc tacttccggg gcctacggct
                                                                     1020
ggtcatgagc cacggcccat acatcaaact tattactggc ttcctcttca cctccttggc
                                                                     1080
tttcatgctg gtggagggga actttgtctt gttttgcacc tacaccttgg gcttccgcaa
                                                                     1140
tgaattccag aatctactcc tggccatcat gctctcggcc actttaacca ttcccatctg
                                                                     1200
```

```
gcagtggttc ttgacccggt ttggcaagaa gacagctgta tatgttggga tctcatcagc
                                                                    1260
agtgccattt ctcatcttgg tggccctcat ggagagtaac ctcatcatta catatgcggt
                                                                    1320
agetgtggca getggcatca gtgtggcage tgeettetta etaceetggt ecatgetgee
                                                                    1380
tgatgtcatt gacgacttcc atctgaagca gcccacttc catggaaccg agcccatctt
                                                                    1440
cttctccttc tatgtcttct tcaccaagtt tgcctctgga gtgtcactgg gcatttctac
                                                                    1500
cctcagtctg gactttgcag ggtaccagac ccgtggctgc tcgcagccgg aacgtgtcaa
                                                                    1560
gtttacactg aacatgctcg tgaccatggc tcccatagtt ctcatcctgc tgggcctgct
                                                                    1620
gctcttcaaa atgtacccca ttgatgagga gaggcggcgg cagaataaga aggccctgca
                                                                    1680
ggcactgagg gacgaggcca gcagctctgg ctgctcagaa acagactcca cagagctggc
                                                                    1740
tagcatecte tagggeeege caegttgeee gaageeacea tgeagaagge caeagaaggg
                                                                    1800
atcaggacct gtctgccggc ttgctgagca gctggactgc aggtgctagg aagggaactg
                                                                    1860
aagactcaag gaggtggccc aggacacttg ctgtgctcac tgtggggccg gctgctctgt
                                                                    1920
ggcctcctgc ctcccctctg cctgcctgtg gggccaagcc ctggggctgc cactgtgaat
                                                                    1980
atgccaagga ctgatcgggc ctagcccgga acactaatgt agaaaccttt tttttacaga
                                                                    2040
gcctaattaa taacttaatg actgtgtaca tagcaatgtg tgtgtatgta tatgtctgtg
                                                                    2100
agctattaat gttattaatt ttcataaaag ctggaaagca aa
                                                                    2142
```

```
<210> 6171
<211> 1509
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1510)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1417)...(181)
<223> similar to gi4680667 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6171
tttttttcc gngctggggg cacgtttatc ccagccaccg cctccagggc ggccgcacag
                                                                       60
gccctgggca tcaatccagc agggctcccg actcactccc tgggagacca gctccccaac
                                                                      120
cacceggeee tgatggeate eegetgegge caggtgteet eteageegag gteettgtea
                                                                      180
ctgcctaget gcgtccgcet gccacaccag ctcacccgag atgtaggtgg cctggacgtg
                                                                      240
aagggaggte gtegageace acgaagtetg egteageace aaagteeagg gteecettae
                                                                      300
tettetecag ecceageaac tgggegggt geagggatge ageetecagg geegaeteca
                                                                      360
tgctgcagcc tgtggcctgc aggatagtgc cggacacaga cgtccattgg ggctatgctg
                                                                      420
ccactcagcg tettggtgcc tgccacgtag gccgtcagac cgtccacttc cacttcctgc
                                                                      480
tgtcccagcg tgtgcccggc gttgcccagg cccaaggcag ggatggcatc ggtgaccagc
                                                                      540
accageceet gggggatggg caeggtgggg egateegeag ggeggegggg ttggtgtgeg
                                                                      600
tgccatctgc aatcatccca tagaagatgc agcggcctgc gggcagccgg tcgctggtca
                                                                     660
ggagccccac gatgcctggg tcgcggtggt ggaaaggcag catggcgttg aagaggtggg
                                                                      720
tgatgaaggt ggctccgctc cacacagcat cctctgccgc ccgcaggtca gccactgagt
                                                                      780
gccctaggga cacgcagatg ccacgggccg tcagcgcccg gatcacttcg tggctacggc
                                                                      840
ccaactctgg ggccagcgtc acgatgcgga cattgtccag gggcccgtag gtggccagca
                                                                     900
agtcctggaa ggcatcggcc tcgaaggagc ggaggtgggc ctcggggtgc gcgcaccgct
                                                                     960
```

```
tetecegget gatgaagggg ceetecaggt geageeegag gacecetgee ceatggggae
                                                                     1020
caccactett cacagggate tgaggaacaa ceteacettg tgataaacet eeggtgggga
                                                                     1080
agtgaccagg gtggggcaga aggaggtgac gccgtgcgac aggatcctcc gggccacgag
                                                                     1140
ggcaaccccc gaacccacgt cctccgtggc ttgagagaag tcaacaccaa atccaccgtt
                                                                     1200
gatctgcacg tcgatgaatc cgggagccaa gatgcggccc ccgcagtccc gccgctcgtc
                                                                     1260
ggccacgege egeteeteaa agaacagett etetgggtee aagatgegge eteegegeae
                                                                     1320
ccacagatcc tecetgagea gtttecetec gegeaggate eggeagttag tgaactggag
                                                                     1380
cacgegggcc ecegeegegc ectgetegec gegeategtg ageegtgteg ggagegageg
                                                                     1440
getceggage eeegeggegg ecaaateeeg egeceagtga egaaceeeag eegagagegg
                                                                     1500
agccgcgcc
                                                                     1509
```

```
<210> 6172
<211> 3050
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1266)...(2364)
<223> similar to gi3413906 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6172 cggacgcgtg gggctgtaag cttcggcgcc tccgcttcac ctatgggact cagactcggg 60 teageetgge geteeetgga eagtatgaae tagtgeaeae getggttget eateagggea 120 actgggagac catccctgag gaggatctgg aggtccaaga gaacaatgag gatgctgctc 180 atgatttaac ggaactggag gtaacgatgc accatgctct cttacaggaa gtggacgttg 240 tggtagcacc atgccaaggc ctccggccca cagtggatgt tctgggtgac ttggtgaatg 300 atttcttgcc tgtgataacc tatgcactcc acaaagatga actctctgag agggatgagc 360 aagagettea ggaaateega aagtatttet eettteetgt attettttte aaagtgeega 420 aactgggctc ggagataata gactcctcaa ccaggagaat ggagagcgaa agatcaccgc 480 tttatcgcca gctaattgac ctgggctatc tgagcagcag tcactggaac tgtggggctc 540 ctggccagga tactaaagct cagagcatgt tggtggaaca gagtgaaaag ctgagacact 600 tgagcacatt ttctcaccag gtgttacaga ctcgcctggt ggatgcagcc aaggccctga 660 acctggtgca ctgccactgc cttgacatct ttattaacca ggcatttgac atgcagcggg 720 acctgcagat cactcccaaa cgtctggaat atactcgaaa aaaggagaat gagttgtatg 780 aatcattgat gaatattgcc aaccgaaagc aggaggaaat gaaggatatg attgttgaga 840 cacttaatac catgaaggag gaacttctgg atgatgctac taacatggag tttaaagacg 900 tcattgtccc tgagaatgga gaaccagtag gcaccagaga gatcaaatgc tgcatccgac 960 agatecagga acteateate tecegaetta ateaggeagt ggetaataag etgateaget 1020 cagtggatta cctgagggaa agcttcgtcg gaaccctgga acgatgtctg cagagcctqq 1080 agaagtetea ggatgtetea gtteacatea eeagtaatta teteaaacag atettaaatg 1140 etgeetatea tgttgaagte aegttteaet eagggtegte agttacaagg atgetatggg 1200 agcaaatcaa acagatcatc cagcgcatca catgggtgag cccacctgcc atcactctgg 1260 aatggaagag gaaggtggcc caggaagcca ttgagagcct cagcgcctcc aaattggcta 1320 agagcatttg cagccaattc cggactcggc tcaatagttc ccacgaggct tttgcagcct 1380 ccttgcggca gctggaagct ggccactcag gccggttaga gaaaacggaa gatctatggc 1440 tgagggttcg gaaagatcat gctccccgcc tggcccgcct ttctctggaa agccgttctt 1500 tacaggatgt cttgcttcat cgtaaaccta aactgggaca ggaactgggc cggggccagt 1560 atggtgtggt atacctgtgt gacaactggg gaggacactt cccttgtgcc ctcaaatcag 1620

```
ttgtccctcc agatgagaag cactggaatg atctggcttt ggaatttcac tatatgaggt
                                                                     1680
ctctgccgaa gcatgagcga ttggtggatc tccatggttc agtcattgac tacaactatg
                                                                     1740
gtggtggctc cagcattgct gtgctcctca ttatggagcg gctacaccgg gatctctaca
                                                                     1800
cagggetgaa ggctgggetg accetggaga cacgtttgca gatagcacta gatgtggtgg
                                                                     1860
agggaatccg cttcctgcac agccagggac ttgtccatcg tgatatcaaa ctgaaaaatg
                                                                     1920
tgctgctgga taagcagaac cgtgccaaga tcactgactt aggattctgc aagccagagg
                                                                     1980
ccatgatgtc aggcagcatt gtggggacac caatccatat ggcccctgaa cttttcacaq
                                                                     2040
ggaagtacga taattccgtg gatgtctacg cttttggaat tcttttctgg tatatctgct
                                                                     2100
caggetetgt caageteect gaggeatttg agaggtgtge tageaaagae catetetgga
                                                                     2160
acaatgtgcg gagggggct cgcccagaac gtcttcctgt gtttgatgag gagtgctggc
                                                                     2220
agttgatgga agcctgttgg gatggcgacc ccttgaagag gcctctcttg ggcattgtcc
                                                                     2280
agcccatgct ccagggcatc atgaatcggc tctgcaagtc caaattctga gcagccaaac
                                                                     2340
agaggactag atgattctac ttgaaagcaa agaccctttc ctctttcact ctcctagtta
                                                                     2400
tttcccttcc ccctcacctt ttggcccatg gggagaattt gacatttatt cactatagga
                                                                     2460
cacaactccc aagggaactg gtgcttgctg ggaaacttgg aaccttccca ggcagggatg
                                                                     2520
actectggae agtgaagagt tgaatgactg agcatattca gcageteact gaagegeeaa
                                                                     2580
gctatccctt tagcaaaaaa gtgtctcaga tgtgtaaaaag ctgaggaatg tggtgttctg
                                                                     2640
gcttcacaaa tgaaaaggag gcagatgtta ccattgtctt ttcactgtat atacttctaa
                                                                     2700
gacagcaagc gggacactgc agtggcaata gtgttaaaaa atctcattct catgatttt
                                                                     2760
ggctctagct aggaatagtt tagtcaggac tcagaaaatt tgagcttagt tctgggatta
                                                                     2820
tgaaaacatg gggacaaaaa caataacttg tggatgtctg gttcctgctg tctgcagcca
                                                                     2880
ggtatctcag gttgcaatgg tcagaagtcc cagtgaggga gctagaaaca gagctatctg
                                                                     2940
ttcctcatag tgccagtgtg tttacattta taggaccaca tatccctggt ttctggggga
                                                                     3000
gggtttcact gttacatcac caagaggccc tgaaaagagg aaaaaaaaa
                                                                     3050
```

```
<210> 6173
<211> 4927
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (22)...(2520)
<223> similar to gi1834495 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6173
ggtcggcggc attcggcggc gatggagcgg ccctggggag ctgcggacgg cctctcgcgc
                                                                       60
tggccccatg gcctcggcct cctcctcctc ctgcagctgc tgccgccgtc gaccctcagc
                                                                      120
caggaccggc tggacgcgcc gccgccgcc gctgcgccgc tgccgcgctg gtctggcccc
                                                                      180
atcggggtga gctgggggct gcgggcggcc gcagcgcggt ggcgcgtttc cccgcggcgg
                                                                      240
ccgttggcgt cgcagcgcgc cgggcgtagg acgaggagtg cggccgggtc cgggacttcg
                                                                      300
tegecaaget ggecaacaac acgeaceage atgtgtttga tgateteaga ggeteagtat
                                                                      360
cettgteetg ggttggagat agcactgggg teattetagt ettgaetace tteeatgtae
                                                                      420
cactggtaat tatgactttt ggacagtcca agctatatcg aagtgaggat tatgggaaga
                                                                      480
actttaagga tattacagat ctcatcaata acacctttat tcggactgaa tttggcatgg
                                                                      540
ctattggtcc tgagaactct ggaaaggtgg tgttaacagc agaggtgtct ggaggaagtc
                                                                      600
gtggaggaag aatcttcaga tcatcagatt ttgcgaagaa ttttgtgcaa acagatctcc
                                                                      660
cttttcatcc tctcactcag atgatgtata gccctcaaaa ttctgattat cttttagctc
                                                                      720
tcagcactga aaatggcctg tgggtgtcca agaattttgg gggaaaatgg gaagaaatcc
                                                                      780
```

```
acaaagcagt atgtttggcc aaatggggat cagacaacac catcttcttt acaacctatg
                                                                     840
caaatggctc ctgcaaagct gaccttgggg ctctggaatt atggagaact tcagacttgg
                                                                     900
gaaaaagctt caaaactatt ggtgtgaaaa tctactcatt tggtcttggg ggacgtttcc
                                                                     960
                                                                    1020
tttttgcctc tgtgatggct gataaggata caacaagaag gatccacgtt tcaacagatc
1080
ttctggcagc aaatgatgac atggtattca tgcatgtaga tgaacctgga gacactgggt
                                                                    1140
ttggcacaat ctttacctca gatgatcgag gcattgtcta ttccaagtct ttggaccgac
                                                                    1200
atototacac taccacaggo ggagagacgg actttaccaa cgtgacctcc ctccgcggcg
                                                                    1260
tetacataac aagegtgete teegaagata attetateca gaccatgate aettttgace
                                                                    1320
aaggaggaag gtggacgcac ctgaggaagc ctgaaaacag tgaatgtgat gctacagcaa
                                                                    1380
aaaacaagaa tgagtgcagc cttcatattc atgcttccta cagcatctcc cagaaactga
                                                                    1440
atgttccaat ggccccactc tcagagccga atgccgtagg cattgtcatt gctcatggta
                                                                    1500
gcgtggggga tgccatctca gtgatggttc cagatgtgta catctcagat gatgggggtt
                                                                    1560
actectggac aaagatgetg gaaggaceee actattacac catectggat tetggaggea
                                                                    1620
teattgtgge cattgageae ageageegte etateaatgt gattaagtte tecacagaeg
                                                                    1680
aaggtcaatg ctggcaaacc tacacgttca ccagggaccc catctatttc actggcctag
                                                                    1740
cttcagaacc tggagctagg tccatgaata tcagcatttg gggcttcaca gaatctttcc
                                                                    1800
tgaccagcca gtgggtctcc tacaccattg attttaaaga tatccttgaa aggaactgtg
                                                                    1860
aagagaagga ctataccata tggctggcac actccacaga ccctgaagat tatgaagatg
                                                                    1920
getgeatttt gggetacaaa gaacagttte tgeggetacg caagteatee gtgtgteaga
                                                                    1980
atggtcgaga ctatgttgtg accaagcagc cctccatctg cctctgttcc ctggaggact
                                                                    2040
ttctctgtga ttttggctac taccgtccag aaaatgactc caagtgtgtg gaacagccag
                                                                    2100
aactgaaggg ccacgacctg gagttttgtc tgtacggaag agaagaacac ctaacaacaa
                                                                    2160
atgggtaccg gaaaattcca ggggacaaat gccagggtgg ggtaaatcca gttcgagaag
                                                                    2220
taaaagactt gaaaaagaaa tgcacaagca actttttgag tccggaaaaa cagaattcca
                                                                    2280
agtcaaattc tgttccaatt atcctggcca tcgtgggatt gatgctggtc acagtcgtag
                                                                    2340
caggagtgct cattgtgaag aaatatgtct gtgggggaag gttcctggtg catctatact
                                                                    2400
ctgtgctgca gcagcattgc agaggcccaa tggtgtggat ggtgtggatg ctttggacac
                                                                    2460
agceteceae actaataaaa gtggttatea tgatgaetea gatgaggaee tettggaata
                                                                    2520
getetteaga ggagetggae ceageatgga tggtggaace acagtacete ttacacteee
                                                                    2580
tgtggctcca acttcaggaa ataaatttcc cattgcgagg gacccagctc tgtttctgct
                                                                    2640
gcttccatca aagccaaaag gtcttgctct aaagaaatgc agggtggggg tggggaaccc
                                                                    2700
tgagcacttt tttacaattg gctctgagaa aaagggagac attttaaatt ctttaacttc
                                                                    2760
ttatttctcg tcctgtctct ttgcaaagta tgggcttgtg tttttgtttt ttaagggaaa
                                                                    2820
cgaaatggaa ttcgaaggga ccttttcact aaccccactt ctgtgtgttc tgcatggtgc
                                                                    2880
ctgccccagg gcatctgcca actccagtat cagctctcac agtgtacttg gtaccataca
                                                                    2940
tgggctaaac tggcgagacg aaacagctgt agagatgaaa acaggctgca gaggctggca
                                                                    3000
cagctggccg gcttttctcc atctggggac agtcctactc caagaacact gcacaccagc
                                                                    3060
tecteacaca gateceaett aeggegegea aegggtteta ggetgeagge ageteqaqqa
                                                                    3120
cccgcggccc cgccccggct cggcctggca gatagcagag gcagcaggcc gtgccggggg
                                                                    3180
ggcatgttgc tgtaaccagt ggcccagggg atgttacggt ggacagtgca cctggagggc
                                                                    3240
gggccccgca gggtgaacca tgctgcagtg gctgtcgggc atcgggtata ctccttcggg
                                                                    3300
ggttactgct ctggtgaaga ctatgagaca ctgcgtcaga tagatgtgca cattttcaat
                                                                    3360
geagtgteet tgegttggae aaagetgeee eeggtgaagt etgeeateeg tgggeaaget
                                                                    3420
cctgtggtac cctacatgcg ctatggacac tcaaccgtcc tcatcgacga cacagtcctc
                                                                    3480
ctttggggcg ggcggaatga caccgaaggg gcctgcaatg tgctctatgc ctttgacgtc
                                                                    3540
aatacgcaca agtggttcac accccgagtg tcagggacag ttcctggggc ccgggatgga
                                                                    3600
cattcagect gtgtcctagg caagatcatg tacatttttg ggggctacga gcagcaggcg
                                                                    3660
gactgttttt ccaatgacat tcacaagcta gataccagca ccatgacatg gactcttatc
                                                                    3720
tgtacaaagg gcagccctgc acgctggagg gacttccact cagccacaat gctgggaagt
                                                                    3780
cacatgtatg tetttggggg cegtgeegae egetttggge cattecatte caacaatgag
                                                                    3840
atttactgca accgcattcg agtctttgac accagaactg aggcttggct ggactgtccc
                                                                    3900
cegactecag tgctgcctga ggggcgccgg agccactegg cetttggcta caatggggag
                                                                    3960
ctgtacatct ttggtggtta taatgcaagg ctgaaccggc acttccatga cctctggaag
                                                                    4020
tttaatcctg tgtcctttac ctggaaaaag attgaaccga aggggaaggg gccatgtccc
                                                                    4080
egeeggegee agtgetgetg tattgttggt gacaagattg teetetttgg gggtaceagt
                                                                    4140
ccatctcctg aggaaggcct gggagatgaa tttgacctta tagatcattc tgacttacac
                                                                    4200
```

```
attttggact ttagccctag tctgaagact ctgtgcaaac tggccgtgat tcagtataac
                                                                     4260
ctagaccagt cctgtttgcc tcatgatatc aggtgggagc tgaatgccat gaccaccaac
                                                                     4320
agcaatatca gtcgccccat cgtctcctcc catgggtagg aggaagtttc tgccacctcc
                                                                     4380
cctcctgage ctgctgtcat cttcactgcc cctgcccatc tgtcacccac ctgctccttt
                                                                     4440
gacccctgga cttggtatac ctccatgtgg agttgttggg cgagaggtgt tctctgtgct
                                                                     4500
gtgaattcag tggggagctg tagcggggtg ggggctaggt tcctccccc ttgggccgag
                                                                     4560
                                                                     4620
ggccccttcc ccttggtgct ctgtccccat ccacctcctt tcagctgctc ctgggcctca
getetgeeca gggeeageea ggttetgetg ggaagggaag ggaatgggga gaagggagaa
                                                                     4680
gcaagcagtg tetgageete aggagettee ceeteceeet ttgeetatee ceteceetet
                                                                     4740
gettgageet tgageettga etgggagetg aaaggagttg eagetgttgg eatgagaeet
                                                                     4800
ccttctcccc gtcttgggga ggtggggacc agcagataaa tcccaccctt ccttgagctg
                                                                     4860
tegetgtaet etgaagttea gecageteag attttataaa aattaattaa aateteeaaa
                                                                     4920
aaaaaaa
                                                                     4927
```

```
<210> 6174
<211> 1765
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1649)...(244)
<223> similar to gi5817247 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6174
ttttttttt ttggaaacaa atcaatgtga agagacttta atggcaaagt gcactggaga
                                                                       60
gttaaaatgg ttacatgggt aatttaagaa aaaatttagt gggaaaaagg gaaagggctg
                                                                      120
aactgccaaa ataattttct tatccagttt tacatttgct ttctccatgt gctacaatta
                                                                      180
tagacacctg atagttccta gccttagaca taacttgcag catcagccac tctgctgcac
                                                                      240
tttagatcac attagttagg gctagagccc agccccattt acacggcatc tqatqaatqq
                                                                      300
ttagctgtgg cagttctacc ataatgccat tttgctccaa agaaatccag ttaagtggct
                                                                      360
gtccatggcc cagtagtttc acctctgttg cccccagaat agctttggga tggccaagga
                                                                      420
acagctgtcc tgatgtgggc catttaagaa aaatggcata gactaatttt tctttaggct
                                                                      480
tggatgtgta ccacacatct ggggtgacag tgtcattctg ggatcgccag gtatgggttt
                                                                      540
cataaatagc ttctccattg acttttagcc aggaccccat ttgcctcagt cgctcctcaa
                                                                      600
aaactacaga aatggtgcca tctagtgtgg gcccaatatt catcaaaaga tttcctccac
                                                                      660
atgaaactgt ctctacaagt tgcttcacca attcttcaat tgtaagatag tcagagattc
                                                                      720
cagcttccct cctatagccc caggacagtt tgtctattgt catgcagttt tcccatttat
                                                                      780
gtggcaaaag atgtcctggg ttataacgat cactgcaggt atagaagcca ccatgcttac
                                                                      840
agatgctacc agctccccaa cgatcattgg tgactactgt gccccgaact gggctttcat
                                                                      900
tatataaccc aggccaagaa gcctgtgctg ttccagtatt gatccggtgc tcctccgtca
                                                                      960
ccatccgacc acagaacctc aggctgatag ttgttcacta actcatagag ctctggcaat
                                                                     1020
gtcttagaaa ctggaaattg ccgcttatgg aatgaactgg attcatcctc aaggaagagc
                                                                     1080
ggatgaaacc attcaaaaag ggaatagtac agtccaaaac gcaggtcagt tctgttccta
                                                                     1140
atggetaeet caagtteett gacaatgtee etettgggee eeteatetat ggeatteeag
                                                                     1200
ttccacgaat attctgaccc cccacaaggt aaagccttca tgatgtttgg aagttaagac
                                                                     1260
aatgtatttg gcaccagagg cctgaaaaat atctgcccaa ctggttggca ttaaaaaatt
                                                                     1320
ttgctgtaaa tagtggtcca aaatcttcat atttgaaact aggagggtaa ttatctttca
                                                                     1380
taaattccac atacttcggt atcttttcct tttgccaata ccaccagaac cactcgctac
                                                                     1440
```

```
cgaagctggg cacggaaaac actcccagt ggatgaagat gccgaacttg gcctggtcaa 1500 accacgcggg cagctggcg gcgtccaggg actcccaggt ggggtcgaag cgcgtggcgc 1560 tgtgggcagg gcacggcgc ggcggcagca gcagcaacag caacagcagc aacgggaacg 1620 cgagcctggg gagctcctgg ggccgcatgt cccggcgag gccggctgtc ctctctgcag 1680 gctcccgcgg cctcgggagc gctgttcttc cgtctctgcc gctgagtatg ccgccggggg 1740 gggggggatt aatttaatta aggat 1765
```

```
<210> 6175
<211> 4000
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (184)...(2337)
<223> similar to gi5689742 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6175

```
aggeggattg tetgtegttg cagtagetgt aggaagggga ggeeatttte egtttetggg
                                                                       60
aggagtgagg ggcaacgggt cggagaaaaa ggaaaaaaga agggctcagc gcctccccgc
                                                                      120
egggeegtgg acagagggge acagtttegg caggegggtg aggtegetga gggeeegeeg
                                                                      180
gagatgtttt ccttgtcgag cacggtgcaa ccccaggtta cagttcctct gagtcatctc
                                                                      240
atcaatgcct tccatacacc aaaaaacact tctgtttctc tcagtggagt gtcagtttct
                                                                      300
caaaaccagc atcgagatgt agttcctgag catgaggctc ccagcagtga gccttcactt
                                                                      360
aacttaaggg accttggatt atctgaatta aaaattggac agattgatca gctggtagaa
                                                                      420
aatctacttc ctggattttg taaaggcaaa aacatttctt cccattggca tacatcccat
                                                                      480
gtctctgcac aatccttctt tgaaaataaa tatggtaact tagatatatt tagtacatta
                                                                      540
cgttcctctt gcttgtatcg acatcattca agagctcttc aaagcatttg ttcagatctt
                                                                      600
cagtactggc cagttttcat acagtctcgg ggttttaaaaa cttttaaaat caagggccac
                                                                      660
gacgtcttcc agtctacctt tcgagagatt agctgaaaca cagaatatag cgccatcatt
                                                                      720
cgtgaagggg tttcttttgc gggacagagg atcagatgtt gagagtttgg acaaactcat
                                                                      780
gaaaaccaaa aatatacctg aagctcacca agatgcattt aaaactggtt ttgcggaagg
                                                                      840
ttttctgaaa gctcaagcac tcacacaaaa aaccaatgat tccctaaggc gaacccgtct
                                                                      900
gattetette gttetgetge tatteggeat ttatggaett etaaaaaace cattttate
                                                                      960
tgtccgcttc cggacaacaa cagggcttga ttctgcagta gatcctgtcc agatgaaaaa
                                                                     1020
tgtcaccttt gaacatgtta aaggggtgga ggaagctaaa caagaattac aggaagttgt
                                                                     1080
tgaattcttg aaaaatccac aaaaatttac tattcttgga ggtaaacttc caaaaggaat
                                                                     1140
tettttagtt ggaccccag ggactggaaa gacacttett geeegagetg tggegggaga
                                                                     1200
agetgatgtt cetttttatt atgettetgg atecgaattt gatgagatgt ttgtgggtgt
                                                                     1260
gggagccagc cgtatcagaa atctttttag ggaagcaaag gcgaatgctc cttgtgttat
                                                                     1320
atttattgat gaattagatt ctgttggtgg gaagagaatt gaatctccaa tgcatccata
                                                                     1380
ttcaaggcag accataaatc aacttcttgc tgaaatggat ggttttaaac ccaatgaagg
                                                                     1440
agttatcata ataggageca caaactteec agaggeatta gataatgeet taataegtee
                                                                     1500
tggtcgtttt gacatgcaag ttacagttcc aaggccagat gtaaaaggtc gaacagaaat
                                                                     1560
tttgaaatgg tatctcaata aaataaagtt tgatcaatcc gttgatccag aaattatagc
                                                                     1620
tcgaggtact gttggctttt ccggagcaga gttggagaat cttgtgaacc aggctgcatt
                                                                     1680
aaaagcagct gttgatggaa aagaaatggt taccatgaag gagctggagt tttccaaaga
                                                                     1740
caaaattcta atggggcctg aaagaagaag tgtggaaatt gataacaaaa acaaaaccat
                                                                     1800
cacagcatat catgaatctg gtcatgccat tattgcatat tacacaaaag atgcaatgcc
                                                                     1860
```

```
tatcaacaaa gctacaatca tgccacgggg gccaacactt ggacatgtgt ccctgttacc
                                                                   1920
tgagaatgac agatggaatg aaactagagc ccagctgctt gcacaaatgg atgttagtat
                                                                   1980
gggaggaaga gtggcagagg agcttatatt tggaaccgac catattacaa caggtgcttc
                                                                   2040
cagtgatttt gataatgcca ctaaaatagc aaagcggatg gttaccaaat ttggaatgag
                                                                   2100
tgaaaagctt ggagttatga cctacagtga tacagggaaa ctaagtccag aaacccaatc
                                                                   2160
tgccatcgaa caagaaataa gaatccttct aagggactca tatgaacgag caaaacatat
                                                                   2220
cttgaaaact catgcaaagg agcataagaa tctcgcagaa gctttattga cctatgagac
                                                                   2280
tttggatgcc aaagagattc aaattgttct tgaggggaaa aagttggaag tgagatgata
                                                                   2340
actctcttga tatggatgct tgctggtttt attgcaagaa tataagtagc attgcagtag
                                                                   2400
totactttta caacgettte cecteattet tgatgtggtg taattgaagg gtgtgaaatg
                                                                   2460
ctttgtcaat catttgtcac atttatccag tttgggttat tctcattatg acacctattg
                                                                   2520
caaattagca tcccatggca aatatatttt gaaaaaataa agaactatca ggattgaaaa
                                                                   2580
cagctctttt gaggaatgtc aattagttat taagttgaaa gtaattaatg attttatgtt
                                                                   2640
tggttactct actagatttg ataaaaattg tgcctttagc cttctatata catcagtgga
                                                                   2700
aacttaagat gcagtaatta tgttccagat tgaccatgaa taaaatattt tttaatctaa
                                                                   2760
atgtagagaa gttgggatta aaagcagtct cggaaacaca gagccaggaa tatagccttt
                                                                   2820
tggcatggtg ccatggctca catctgtaat cccagcactt ttggaggctg aggcgggtgg
                                                                   2880
attgcttgag gccaggagtt cgagaccagc ctggccaacg tggtgaaaca ctgtctctac
                                                                   2940
taaaatacaa aaaaataggg ctgggcgcgg ttgctcacgc ctgtaatccc agcacttttc
                                                                   3000
agaggecaag gegggeaaat cacetgaggt caagagtttg agaceageet ggecaacatg
                                                                   3060
gtgaaacccc atctctacta aacatgcaaa aattacctgg gcatggtggc aggtgcttat
                                                                   3120
aatcccagct actctggggg ccaaggcagg agaattgctt gagcctggga gatggaggtt
                                                                   3180
gcagtgagct gagatcatgc cactgcactc cagcctgggc aacagagcaa gactctgcct
                                                                   3240
3300
ctggaatccc agctacttga gaggctgagg cacgagaatt gcttgaaccc aggaggtgga
                                                                   3360
ggttgcagta agccaagatc acaggagcca ctgcactcca gcctgggtga cagagtgaga
                                                                   3420
ctctgtctca aaaaaaaatt aaataaatta ttataacctt tcagaaatgc tgggggcatt
                                                                   3480
ttcatgttct tttttttagc attactgtca ctctccctaa tgaaatgtac ttcaaagaag
                                                                   3540
cagtattttg ttaaataaat acataacctc attctgaata atgtccctca ttttgactat
                                                                   3600
aactgtgctt ggtttcaaaa gcaaaattaa acaaaaatct cagtcccctc cgaagtgaac
                                                                   3660
tttgtgttac cctgcgtcag aaatgccaag ttgtgtttac ttttcattca gattttgtga
                                                                   3720
atatgaacat gctgttatag gatctacaga tgaatattta actcaataga aaaattattt
                                                                   3780
tagaacacat tgtattggta ttacaaccag attatattct tgacgttgac ttcattaaaa
                                                                   3840
ttatctacaa tttcctaata atttaagctg tatatggtct tcattgaaaa aagatagata
                                                                   3900
ttgttacagg aagcttgtta cattatattc ttgacctttt ggttgataat cttaaatctt
                                                                   3960
aatgtaattt caaactggca gaaatgttgc cagcataata
                                                                   4000
```

```
<210> 6176
<211> 2218
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2219)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2174)...(432)
<223> similar to gi6013001 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6176
ttttttttt ttccacggaa acagccgttt ttattccaca aacagtaaac tccatccact
                                                                       60
acacagtgac atacactgtg tagcacaccc catcaccttg gccagtgctg ccagccgacc
                                                                      120
tttctgtggt gatggaaatc tttttctgtg ctgtccaata cagcagccac cgaccacttt
                                                                      180
tgcttattga gcacctcaat atagaggtgg ccactacagg tgaggaaatg aatttctaag
                                                                      240
ttaattcaaa ttcaaatgcc acatttggct cgtggctcct gtactggaca acacagctgt
                                                                      300
aggccctgac ctggtccagg gcactttggt tcaaaagcca actctgagga gagcaagtgg
                                                                      360
cagaaacagc ccttgggctc ccctccccag agagaaacgg cagctgcagc tgctggaaag
                                                                      420
ggcaagaatc agagtggggg gacacctcgg gcgcgccgga taaggttggc cagccgcttg
                                                                      480
gccaggccac ctgtgcgggg ctcctcgatg tggaaggttc gggtgaggag attgtagaag
                                                                      540
gagccgtagc acacggccac cacagtgcac gtgaggcaga tcacgttgta gggcatgctg
                                                                      600
aagtccggtg tcggcaggtt caccagcagc ggctccgtgt agagccgcac aaagtagtta
                                                                      660
gagecateag agaetgggaa eaggetgttg aagaggggae tetetteeea gteeaetgge
                                                                      720
ttggctgcta ccatgctggg cacaagggcg ctgaggacag atgggctgac atagaagcca
                                                                      780
tggttaggat ctggcgtgta ctcggtccac ttcagcagcg cccgctcaaa ctggatggaa
                                                                      840
accttggtga ctgagttggc cggcagctga atcagcatct ccaggaggtg gggttgcagc
                                                                      900
cggtcctggg caggctggta gtggatgtaa cttggtttgt tctccttgcc cttggaggtg
                                                                      960
atggtgaggg tgtgcacata cagccgcaga taccagggta cggtgtccag cagcagcacc
                                                                     1020
gggaaggccc ggtatgggtg ggtgttgtac agcagtgtgc tcagctcccc cttctqcaqc
                                                                     1080
ccatagccac tcacgtaccg ctgggcatgc aggaagggca ctgggggggc ctcattctct
                                                                     1140
gggggtetet tecaettgag etggatgttg aggtttegag agttgttgat catggeggtg
                                                                     1200
tcaagcaagt catagatggc ataggtcttc cgagtgccta ggatgacgtc ctgatatgta
                                                                     1260
gtggtcgggg gtgggtgcac ctctaatgtc tcgttgtcct ggggacacaa aggcagggct
                                                                     1320
ggttgtaggt ggtgatgtcc acatagactc ggctctctga agccaggggg cagggctccg
                                                                     1380
tgagggttcg ggagaacatc cggaagaggg accagtcttt ctttccctgc cccgtgatga
                                                                     1440
aggcatcaaa tacaactgac agggtctgcc tcagctccca ggagatgcta gtacagcgtg
                                                                     1500
catttctgca aacagggcgg atatgcactg cctgggagtg gtagctggtg tggaacaagc
                                                                     1560
gatctgcctt cagcagcaca gagaggcctg ccttggaact acagggcaag agcttcttcc
                                                                     1620
agggggtgag gttttcggtg cagaccacct cccgcggcag cacagcatag cgcagaaagt
                                                                     1680
agtggtcagt gtcattggcc agacccaggg gtttgaagga ggcagtggga gtgactgtgt
                                                                     1740
tggtggagtc gatgaagttg agagaggcgc agaagatccc tgagaggaca ttactgagct
                                                                     1800
ccttccaaga tttatccaca tcagtgacag tgtcttggaa ccagacccac agctctgcac
                                                                     1860
ctgatggggc ctgcaggaag ggtggccccc agtatcgggt cctccaaaag ccttgtgtga
                                                                     1920
atgacaggtg cagctcccgt agagaatact tggagatcag ctgccccagg gctttgggaa
                                                                     1980
agagectgta atgggacact cetteceget gaageteega ateceagege gtgeggaact
                                                                     2040
ggaatgtggc ggctacgtcc ccggaaggca gcggggtgat gacaagttcc tcccgcaggc
                                                                     2100
tgtcgcgtgg gggttctgca aggcaccagc cgccgggccc caggagcaac aggacgagca
                                                                     2160
gagcaagcgg catagccgcc cccatgcccg nacgcgtggg cggacgcgtg ggtcgacc
                                                                     2218
```

```
<210> 6177
<211> 2199
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2179)...(1220)
<223> similar to gi5917714 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6177
tttttttttt ttttcattaa ttaatatatt ttctgcatta tagttaacca tatgtacttt
                                                                       60
cttcggtgtc accttatttt ccgttaagta ttgatatttt gttatattca aacatgagta
                                                                      120
catttcaaca gtcttttgca ataaatacca taaaataata gagattcgca taataaatat
                                                                      180
tctttacaat aaaaaagttt aacagacttt tgtcttaaaa atagtcagaa ttcaactttg
                                                                      240
tgatttatac ataaaatata caaaaagcac cacaatttgt ggttaaggca aggaaaacac
                                                                      300
agaagagatt agaattactc agctgttaac tatccaaggg gccaaaagga ccattaagga
                                                                      360
gccaagatca ctttaggcag catagttctg tgacacatat agattgatca gctataaata
                                                                      420
tcaacttgag ttatccaagt gccctcaatg acaacaaaaa tttggtgaga agcatggggt
                                                                      480
gaagaaggaa ggtggctgag tccttcacaa atacgaaggc tagagtgaag atgggcaagg
                                                                      540
tccaaccaat attatctcca atgtgaagat ttacattgta aggcgaatct aaaattacat
                                                                      600
agaaagaaaa aatacacttg gcatctccag agtaagacaa caacaaaact gagggggaaa
                                                                      660
gaaccttgaa ggagaaagaa ggagagggca gtggttaaag gaaaattttt acgttatagc
                                                                      720
aaaaaatata tcccccatgc tacttaaggg gcctatgcta ggaagatagc cctaactgga
                                                                      780
gacagattta atacatagct tatttaagca attaaacagt tgctttttaa aaaaccaatt
                                                                      840
tecetgetee caeggtacee aateaaaaca actetaaate actgtagtet ggatgtgggt
                                                                      900
gtatgttcat gtacacaact ttagaaagtt gcttgcagaa caaaaaggct acacaaaagc
                                                                      960
ccactggctc tcaataccct caagtggatg gcagaggctc ttgttgaaag tgggagccag
                                                                     1020
gtgcagcttc ccagtccact cttgctgaag atcatccatg aggaaagaga aaaatccatg
                                                                     1080
agttagacct tggcaacagg ggaagagaag gtgggaaaca gggaaaaatt ctaaagaaaa
                                                                     1140
caaaaacaaa aacaaaaaca aaaaacagcc acaacttgaa agctagaagt tcaggaggta
                                                                     1200
caacccacct ccaaaaatca tgatggttta ccctgacccc gggaggggca gctctccagc
                                                                     1260
ttacaataga cagtgttgga gttcttacat ctgcaccctg ggcgatggat ccagtcataa
                                                                     1320
cacctcctgc acagcttcag gcatccttta gcaggaggat aacagagtaa gcaaggtaaa
                                                                     1380
aataaagaca tggctcccat acacaggtat ctagagcagc agtgtgattg tgaacaggag
                                                                     1440
caaggattat ctgaatagga atccccttcg tcgtcattgg agcagtggta gaagatgccc
                                                                     1500
ttgacctaag cacatgcagg ttccatattc caccatgctc tcagcagagc aaaggcactg
                                                                     1560
ccggttacag gccaaacagg atggtagggt cctgggagca gtgcattctc cacacttgca
                                                                     1620
cttcccacac tgttcacaaa tgaacttgtg ctgtgtcagg tcctctttca aggaaccctt
                                                                     1680
caagtcatcc acaatcagtt gcttgggctg ggtccggatt gccctttcag acctatgacc
                                                                     1740
agggactggt ctggttggtg gtgaccttcc taacagtccc tgttcagaag aggcactgct
                                                                     1800
gttgetecca gagetggetg eacttecagt getggttgat etgeteaaaa tggggeeeet
                                                                     1860
ggcattactt gggagtactg catgtcccag gtggcttgtg tgtctgtgct cgtagttatt
                                                                     1920
attcacatta attggtatga tttcatgagt cctttcatgc ttttcttgtc ttggtgctgt
                                                                     1980
ccgaggagca ggtcttttca ccaccgaagg cccttctgtg tattcattgc tgcctcttat
                                                                     2040
ggccttgatc tggtctaagg acaaaatagc agtaggctga atctctctct catagtctaa
                                                                     2100
tctcggacgg ctatccaaag aaggctgctg gataacaact aacgaactgc cactgccatg
                                                                     2160
ttgattttgg ggatccatgt gtagtgatct cgagttctg
                                                                     2199
```

```
<210> 6178

<211> 2565

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2566)

<223> n = a,t,c or g

<220>
```

<221> misc_feature
<222> (1527)...(793)
<223> similar to gi5262359 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 6178

gtaaaaataa ttgttttatt tttattgaca tgactgattg attgattgct attctgtgca 60 cttaattaaa ctgattgtga tgacttttca tttgtttaca tacgttgctt cagtcttctc 120 aggtgaaagt agtgagaaaa ccgtgaaaga ggggggaaac atttatccat tatatqctqt 180 ttcactggaa gtgttaccag cagtccacag aactaatgtg tccccacaga cttctcaatc 240 ctctccacac cgaagtgcaa aaccacagca gggaagatgt gcagggagat gtggagcaaa 300 acacagocaa titgocotca cotcaacatg cittigaatg caatatacca ciqtittacq 360 acctaaggat ctacacacct taaaaaccct aaagtaaaat aaaggaatag tgtcaacatg 420 ccatttattt tttgtcatct tgaactaaaa gtacagctgc aagcaagctt gctataggac 480 aagetteage ttgggaaaca teaactatet geacteagga ettacetatt teeagaggaa 540 tategatgga aggtcaggtt aatacttaat ttcaggttgt ttgctacttt taaatcaatg 600 cagtgtctag ttataataaa gagtcaaaca atgctttaca ttgtatatat qttcataqat 660 ttcatccaat ataaaataaa gacagtcctt ttaaaccaaaa gataqqqaaq aqqtaaatqt 720 gacacttttt ccgcttacaa aaagtaatgc cttataataa attttaattc aaccatttag 780 gggggtcagc tgcagtgaac cttttatttc ttcaaaatgc tgcttctgcc aacaqaattt 840 catgttctct tctttacaga tagatagata ggaactcctt caattgtaat tctqtttqcc 900 ctagagtagg cacaaaattc agtgcaacca tggcatagtg ttcttctggc cagttcccac 960 atctccattt catgatgatc ttcttatttg ttaactcctt tacagtgaag atgctataca 1020 gctgctctac agttgtgtca aacagttcca tcatgtgaag agccacagtg ggaatcctta 1080 cacccagtgc cactggagat gaggcctgaa cctgcagggt attcccactc agttttcttt 1140 tgacagtcaa ttcctgggtt gccatagctt tcgttggtaa aatcattccc gttgtaaatt 1200 ctcagtgtca tctacttcat tttcctcaga aagattgggt atttcaatca atcccttgtg 1260 cttcactcca gattctttaa cgatgccttt ccagcccagt ttgatgttcc actcatagaa 1320 gaaaatcagc tttcctttgc ggctgctgca cgaagcctcc ccttccacct gcttcaactc 1380 gttgatctcg ccgcggccag cgtcattctc cacaacgatq cccaccaqqa qctcctqqaa 1440 cttccctttg gacaagctgg tggcatcccg ctctgtcctg ccagggacca gaaagtcgtg 1500 aatggaagcc ccagctggga tccacctgcc tgggtgccag ggtcacgtcc aagcccagcc 1560 cagateggee caagteetet caageageet egaaacetge caacetecaa tqtqeteete 1620 aaacctgctt tctatcaaat tcttttcatc ctgctcagtt ctttaagata ttattgtcca 1680 ctatgcaagt agtattctgt cttaaaaaca ctggcttatt taagggagga ggatctagct 1740 agetegeeca etggaaatag geaaageeta ggeeacaggg aaagtageag tagtgaaeta 1800 atcagaatca tgacaatacc agctatcaag tgtcttcgca tatacatcgt ctaatgtaat 1860 cttcccaggt aatattctca ctttagggga cagaaacgag ctgagagaaa tgacatgtcc 1920 atcgggccaa ggctaggaca ctagaaagtc agatctagct cacgcctgta atcccagcac 1980 tttagtaggc ccaggcgggc ggatcacgag atctggagtt cgagagcagc ctgaccaaca 2040 tggtgaaacc ctgtctctac taaaaataca aacatcagac ggacgtagtg gcacgcatct 2100 gtagtcccag ctactcatga ggctgaagca ggagactcgc ttgaactctg gaagctgagg 2160 ttgcagcgag ccaagattgc ccatgccctc agagctcctc cggaccagcc aagtcatgct 2220 cctctgggga ccggcctcag catcccctcg acggcctgga gggaccacag ccccggccag 2280 aggcgcaggg cagaggacat cccttccgga ggttctgcgg cggagggctg ccgacctctc 2340 cccacgcgcc aggtgaggcg cgtaaaggaa ggggagcttg tctcactcac agagggcccg 2400 gctcgcggga ggcgcctgcg gggtgggcgc gaactgagat ccaaatttct gccctttcca 2460 ctacgttcca tacccccgcc cctaacacag tctctcaatc cagctccctt ctaactcncc 2520 gaaacatcca gaggggaatt ceneggenet egaatgtggt tegat 2565

```
<210> 6179
<211> 1530
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (91)...(1320)
<223> similar to gi190994 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 6179
accccatgca tggagtgtat aaaaggggaa gggctaaggg agccacagaa cctcagtgga
                                                                       60
teteagagag ageceeagae tgagggaage atggatggat ggagaaggat geetegetgg
                                                                      120
ggactgctgc tgctgctctg gggctcctgt acctttggtc tcccqacaqa caccaccacc
                                                                      180
tttaaacgga tcttcctcaa gagaatgccc tcaatccgag aaagcctgaa ggaacgaggt
                                                                      240
gtggacatgg ccaggcttgg tcccgagtgg agccaaccca tgaagaggct gacacttggc
                                                                      300
aacaccacct cctccgtgat cctcaccaac tacatggaca cccagtacta tggcgagatt
                                                                      360
ggcatcggca ccccacccca gaccttcaaa gtcgtctttg acactggttc gtccaatgtt
                                                                      420
tgggtgccct cctccaagtg cagccgtctc tacactgcct gtgtgtatca caagctcttc
                                                                      480
gatgettegg attectedag etacaageae aatggaacag aacteaceet eegetattea
                                                                      540
acagggacag tcagtggctt tctcagccag gacatcatca ccgtgggtgg aatcacggtg
                                                                      600
acacagatgt ttggagaggt cacggagatg cccgccttac ccttcatgct ggccgagttt
                                                                      660
gatggggttg tgggcatggg cttcattgaa caggccattg gcagggtcac ccctatcttc
                                                                      720
gacaacatca totoccaagg ggtgctaaaa gaggacgtot tototttota ctacaacaga
                                                                      780
gattccgaga attcccaatc gctgggagga cagattgtgc tgggaggcag cgacccccag
                                                                      840
cattacgaag ggaatttcca ctatatcaac ctcatcaaga ctggtgtctg gcagattcaa
                                                                      900
atgaaggggg tgtctgtggg gtcatccacc ttgctctgtg aagacggctg cctggcattg
                                                                      960
gtagacaccg gtgcatccta catctcaggt tctaccagct ccatagagaa gctcatggag
                                                                     1020
gccttgggag ccaaggagaa gaggctgttt gattatgtcg tgaagtgtaa cgagggccct
                                                                     1080
acacttecce egacttttet ttteetettg ggaggeaaag atacaceget caccagegeg
                                                                     1140
gactatttat ttcaggaatc ctacagtagt aaaaagctgt ccacactggc aatccacgcc
                                                                     1200
atgtatatec egecacecae tggacecaeg ettggeeetg ggggeeaeet tteatecgaa
                                                                     1260
agttttacac agagtttgat eggggtaaca accegcatgg ettegeettg geeegetgag
                                                                     1320
gccctttgcc accgcaggga aggccctgcc ttcagccctg gcccagagtt ggaaccctct
                                                                     1380
ttgaaatgcc cctctgcctg ggcttatgcc ctcaaatgga gacattggat gtggagctcc
                                                                     1440
tgctggatgg gggccctgac ccctgcccca gcccttccct gctttgagga caaagagaat
                                                                     1500
aaagacttca tgttcccaaa aaaaaaaaa
                                                                     1530
```

```
<210> 6180
<211> 1818
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1767)...(194)
<223> similar to gi52757 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6180
ttttttttt ttactggggc ttctgcaatt tcaaatcagc actttgcagg gagacaacgg
                                                                    60
ggtttttgaa tagtatcacc tggtatgaaa agttttccca agaaaccaca aacgattgtt
                                                                    120
cattttttct ccttttttgt taactttttg ccacactcaa gtcagtttaa gtcctagcaa
                                                                   180
aaagacggta gttaggatac cactgtggct gtagatgatg tgacactggt tgaatttgtg
                                                                    240
ctggcgtttg tgtaaacttc cctcgctgtt tgtgtttgat tccgttaggg ggcaccctgg
                                                                    300
ettgaattgg getegaagga ttgeteetge tggeactgea atgtggeeeg eggeeetggg
                                                                   360
ttctggtgtg taggtaaagg taaggctggt ggaataaatg attccatcat ttcqqaccaa
                                                                   420
agttactgga acctggactg gttgccggac ccatctccaa ccttctcgga atgcagaaat
                                                                    480
gtctgggacg acacagagca tactctctcc acacctgtac atagtttcag cttctacatc
                                                                    540
cccaaaccac actegtaaat ttggagtgaa attetgteet gtaagtteaa geattgetae
                                                                   600
gtccccaccg ccattcaact gaaggctctc taccacaggc acaggagtga ctggggcaag
                                                                   660
gacagggccc attccctcat aaaatgtata ctctgcctta tctqtqctaa tqattqtcca
                                                                   720
ggaagegeca teatetatea teteteteae taggtgetat tggacatgga gtggeetgaa
                                                                    780
attgaattat totttottga gaaaggcaca aatacattot ttotgtatoo ttaaggtaaa
                                                                   840
atgcacattt atggagttgt gacacaggat catctgcatc caataatgcg gtatgcttat
                                                                   900
caactttcat aattatcaat cttgggagtg ccatgccagt aactgagcac acaagtttgc
                                                                    960
atgtttgtcc ataatggatg tagacatctc ggactgtgaa ttcttctcct tctgattcat
                                                                   1020
catcatccaa gagatgaata aaaaaggctc cccactgctg tgaactggca tgaaaattac
                                                                   1080
ctccttctac atgcaagtat ctggtactaa ctgtctggga tcgtagtcga ttaaacagag
                                                                   1140
ccacctttgt tcctgaggca atgcataagt cagcattttt caatgactgc ttctttttgg
                                                                   1200
aaggtttgga gatgactttt atccgcttgc tgaggaacac accaatgtca tcactgttgc
                                                                   1260
catagaacat ctttacagac aacatgaagt gctttcgctt gtctgagtca gatatataca
                                                                   1320
atgttttggc tgtgcaatag ttctttcctt ccaagtttag ctgctgcatt tcttggtcac
                                                                   1380
tatttcctat cccaataaat gcacacggtt gagactcttg ttcagaacaa ccatcgcgtt
                                                                   1440
ccatttgttc tttttttc ttccatccgc tgcccataag atatacacaa ggaggtgggc
                                                                   1500
aaaaaaacct tttttcattt ccatatgact tctgtgcaac ttttgcatga agaataagta
                                                                   1560
ctgtttgatc ccctcgctct tttaaataat ttcgcatagc ttccctagta agtcgtttag
                                                                   1620
gtggaggccg ctcaccaaat ttcccaggcg atggagcatg cgcaggcggc tcctccgcgg
                                                                   1680
gegageeete egtgtggtee atggggageg eteeggttat eegggtttta ggaegegett
                                                                  1740
1800
ctagagattc ccacqaaa
                                                                   1818
```

```
<210> 6181
<211> 1768
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1703)...(752)
<223> similar to gi469885 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6181
ttttttttt ttgctaaatt caatatttat ctgaaagtta aagaaaagca aacaaacata 60
tacaaaggac atttcatttt taatcactca aaaatgaaaa aggtttggac aatgtcaaat 120
```

```
tccactcacc ataatgctat aqttatacat taaatataat tactatctat acatatgcaa
                                                                      180
aaatataaag ttctatttca tacaataaaa ccctttatag aaaccatttt aaaattaagc
                                                                      240
agaacttctc aacattaata tgtgaggtga ggtctaagtc cttctaaagg tttctttaaa
                                                                      300
ggtttttaaa caaaatgcta aacctaaaaa cattgtcctg tcagttccca aattaaatct
                                                                      360
acttagaaca aaaacaaaaa tttatagctc ggtcacatac tacttaaata atattgttca
                                                                      420
                                                                      480
ggcatctcta aaatcctcca tgttttcaag tatggaaata gaactcaaat attccacaat
acagtactaa acagatggag tatttaggaa agactttgtt gtcatatggc acaatattaa
                                                                      540
tattttgttg cttcaatacg ttttgaaata aatatcagat ttttgttttt ttttcctaaa
                                                                      600
                                                                      660
agaccaaaat tataatctac attaagataa ttctgactgt ggttaagact taagagtgta
aaatacaaca tcaatatttt atcacaaaag taaagctggt aacaaattat aaaaggagcc
                                                                      720
agtactctac tgagacaggc tcggagatta aagctcatca tgatagaaat agtcatcatg
                                                                      780
gagetgtetg ceataatetg tggetteact ggtgagaaac aagteegggt tttecagaat
                                                                      840
ctcttcttca gagagctttt tgtcaccatt caaatccatt tcatcaatta gatgaagcgc
                                                                      900
ctcctgcttg tgcaatgccc tgattattag gtactaccca aggtaacagc tcttggggat
                                                                      960
caageetgee ategttatet ttgteataat catteaegaa tetgtettte teaacaagta
                                                                     1020
tecattetgg atetteattt geagttggat eecacetgta ateaceaaga aattetteea
                                                                     1080
aactaacaaa tccatcacca tttttgtcat gttcttctaa agcttcttga atgacaaatt
                                                                     1140
ccgtcatata atcaacttct tcaggatgct caaaagcaat aaattcttca agactcaaac
                                                                     1200
egggacetga atcetggtta gettttteaa atcgettett gteetttaag tgaagettee
                                                                     1260
taaaggactc ctcttctgca tcatccagag cagtgttctc atcaaagtca atcacacgat
                                                                     1320
catacatctg aatgttatat tcatcccaag tcacagtatc atcactgttt ttatcatatt
                                                                     1380
caacaaactg ttgttttgct tcttgcatag cataatgctt aaaagacatc tgaatccatg
                                                                     1440
aactgagttc actttcagtg agaaagccat ctgagtccaa gtcgattttc tttatgatcg
                                                                     1500
cetgeagtet tttttgetge tettegtgge egagtttaac atatteatee acatetteet
                                                                     1560
ggacgcccag cagcgcctcg cggtcgtagt cgctgcggcg ctcgcccagc gggtagtgca
                                                                     1620
getcetegge ettgeeggeg eeggeegegg eggegeacag eageageage eccaaegeeg
                                                                     1680
cggtcctcgg gcccagccgc atcgcgccgg cccgcggagg acaccgaggg acgcgaggag
                                                                     1740
ggaggctggc gggggcccgg gcggctgc
                                                                     1768
```

```
<210> 6182
<211> 2772
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2418)...(118)
<223> similar to gi4589141 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6182
ttagttagtg aaaatatata tttgccacca gaattcactg ggaccccaga gccagcagat
                                                                       60
gtggttggaa agatcctctg ctctgtcctc tggcctcctg ctgcatctgg gccatcagtt
                                                                      120
ggactggagg agctggacgg gcacatagtt ttcctcagag gcaccatcct catcctcctt
                                                                      180
gggaggggaa gccaggacag ggttctcgag agttcgaggg acacctgccc ctggacgggt
                                                                      240
cctcacacag cgtaggcacg cgtctgctcc catgaagccc agttcacctc ctccaccctg
                                                                      300
aagcaccage geteateggg getgeeatet ggettagtge caaeggteag cateacacet
                                                                      360
gecegetget tetteetgea ecaceaatag ecatteteca tetecaggae agagatgget
                                                                      420
ttctgcagct tccagatgct ccagctgtca gtggcgacac tgttgacggt ctcgctcatg
                                                                      480
agggcgatga gcatgttgag cagcaggatg taggtgagca gcacgtaggc cagcagcagc
                                                                      540
```

```
agcagcacca tgccgcggaa gtgcagctgc tcctggaagg ccagctcgcc catgccgatg
                                                                    600
gtgaatttga agageteeaa ggaggettee aggataeeee tgtaetggge eeegttgeee
                                                                    660
                                                                    720
tegteeteet gteeteeat gggetgeact gaetetgtgg cattggggee tgtaggaget
teggggegee aageeteetg geteaggete accagggeta cagegaagee gaaaaggaag
                                                                    780
                                                                    840
actaagtaga tcagaaggaa gcgcagcagg tcccgcagga tgaccttctg gatcatgaca
900
accagegeag acacaageag gggeaggtae caetegatgg ecaggaaaca cageacetgg
                                                                    960
gacaccactg tgagcagggc ctggaacagg aagaggattt caaagtagct gtctatgaac
                                                                   1020
gagatccaga tgaacacgtg gcgccgccag aagtaccaca gctggcccac gaggaggtag
                                                                   1080
atcccccta gcaggataag gatgtggccc gtcagcagca tggagtttcc aacctccgct
                                                                   1140
ttcaggtgag gggcggcctg cttcttcagg gtaggctgat ggtaggcaac agcggtgaag
                                                                   1200
atgaacatgt agatcagatt acacaggaag tttaagaaga acttggggat gagcagatcc
                                                                   1260
cattlegect geageagttt gtteagggge teeaaaacga ceatteggtg teggtgeggg
                                                                   1320
ctcttgcaat gaaaggcaat gatctccagc actgagttct cctcacagct gtccacagaa
                                                                   1380
gccaggtcat acagcgacac ccggacaggc ccatagcacc actcggtgaa ctttcgggaa
                                                                   1440
aggtggctca gtcctgaaaa ctcccgctgc aggatgtgcc tgaaaatctc gatcttgccc
                                                                   1500
teettggegg ceagetteag aggegtgaga teetgeaggt tgeggatgte eteaagetge
                                                                   1560
acggtagggc agaggcgggc cccagcttgg aggagcccat catacatgct ggtcaccagt
                                                                   1620
gcaatgttct cagctgagtt gtccgagatc atcactaggg catgcaggac tgtgttgccc
                                                                   1680
tgggagtcag tggcctgcag gctggcgggc tggtgtgggt tctccaggag gtagcttacc
                                                                   1740
acateceaet gettggtgea ageggeeaaa gagaggggta geteaeegaa ataaaageaa
                                                                   1800
gtcccttggc ccttctggaa gaagcggccg caggcccggg catgcacatt ggccccattc
                                                                   1860
tecaceagga getteacaca etgeagacte egtgttgtea atggegatgt geagageget
                                                                   1920
gtggcctcgg taatagtcat ctgtgcactg ggcatttacc aggggctgag gattgccaga
                                                                   1980
gtcccgatcg atctgcagca gtggcagaat gcaggcattc gactccgtcc ttaaggttca
                                                                   2040
gcacagcett catcaggeac gtettacetg tggagecete tgtgtattee gagteggtga
                                                                   2100
ggtacttgct ggtcttgctc aggtactctg gaagtccagc cagatcctcg gggacacccc
                                                                   2160
gggagaccgc attgaagagc cgatctcggt caaatcggtt tggatccggc tgactggcac
                                                                   2220
ctgttccctt tcggtagttg aggttgactc ttatctgagg ggcgaatttc cggtcctcgc
                                                                   2280
cetggaactg tgactecatg ggaggcagee egeteceaaa atecagettt cetetgteeg
                                                                   2340
cctcagagcc atcttcttgg cctccatcta atgtctccaa cctgaaaact ggagagctgg
                                                                   2400
agggtgaggt catcetagga ggaggagget geteggteca gecaggacet etgtgeagat
                                                                   2460
ggagatgtca agggtcctgt cttcctccca gctgcgcgtc ggtgttggcc tgactggagc
                                                                   2520
cccgcaggct gaggccaggg cgtggcggct gctgggatcc cggagcttct cagtagcagg
                                                                   2580
ggctgcggga ggaagtgaag ccgggagggg ctgccggcgc tgacagcaga ggagcggcgg
                                                                   2640
aacctccctc cccagctctg agcactaagc tccagcaagc aggttctggt ctctcagtca
                                                                   2700
ccctcagccc acctggccag ccggcacggt ggagagcggg agcttaactc tcccctgtca
                                                                   2760
ggacaggcta gc
                                                                   2772
```

```
<210> 6183
<211> 4477
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4478)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (37)...(2739)
<223> similar to gill36436 in the genepept database release 114,
```

<400> 6183 aggcaccggg gnnaaattcc cgggtcgacg atttcgtacg cgcggcgccg ctcggtgcag 60 accatgaatt acgtggggca gttagccggc caggtgtttg tcaccgtgaa ggagctctac 120 aaggggetga ateeegeeae aeteteaggg tgeattgaea teattgteat eegeeageee 180 aatggaaacc tccaatgctc ccctttccac gtccgctttg ggaagatggg ggtcctgcgc 240 tcccgagaga aagtggttga catagaaatc aatggggaat ctgtggattt gcatatgaaa 300 ttgggagata atggagaagc attttttgtt caagaaacag ataatgatca ggaagttatc 360 cctatgcacc tggccacctc ccccatcctg tcagaaggag cttcgagaat ggaatgccag 420 ctgaaaaggg getetgtgga caggatgaga ggcetggace ccagcacgce agcecaagtg 480 540 agaaagtcac agctggacag cctgaagaga gatgacaaca tgaacacatc tgaggatgag 600 gacatgttcc ccatcgagat gagctcggat gagccatgg agctgctgga gagcagcaga 660 actettecta atgatatace tecattecaa gatgatatte etgaggaaaa cetetecetq 720 gctgtgattt accctcagtc agcctcatac cctaattcgg atagagagtg gtcacccact 780 cccagtcctt ccggttcccg accttcaaca cctaaaagtg attcagaatt ggtcagcaag 840 tccacggaaa ggacagggca gaagaaccca gaaatgcttt ggctgtgggg agagctgccg 900 caggctgcta agtcttcttc tccacacaag atgaaagagt ccagcccatt gagcagtaga 960 aaaatttgtg ataaaagtca ctttcaggcc attcacagcg aatcttcaga cacttttagt 1020 gaccaatcgc caactctggt cggtggggca cttttggacc agaacaagcc tcagacagaa 1080 atgcagtttg tgaatgaaga agacctggag accttaggag cagcagcgcc actcttgccc 1140 atgatcgagg agctcaaacc cccctctgcc agtgtagtcc agacagcaaa caagacggat 1200 teteetteea ggaaaagaga taaacgaage egacatettg gtgetgaegg egtetaettg 1260 gatgacetea cagacatgga teetgaagtg geggeeetgt atttteecaa aaacggagat 1320 ccttccggac tcgcaaaaca tgcaagcgac aacggagccc ggtcagccaa ccagtccccg 1380 cagtcggtgg gcagctcggg cgtggacagt ggcgtggaga gcacctcgga cgggctgagg 1440 gacctccett ccategocat ctccctctgc gggggcctca gcgaccaccg ggagatcacg 1500 aaagatgcat teetggagca agetgtgtea tateaacagt ttgtggacaa eecegetatt 1560 atcgatgacc ccaatctcgt ggtaaagatt gggagtaaat attataactg gacaacagca 1620 gcacccctcc tcctgggcaa tgcaggcctt ccagaaacct ttgccaaagg ccactgtgga 1680 atctatcatg agggataaaa tgcccaaaaa gggaggaaga tggtggtttt catggagggg 1740 aagaaacacc acaatcaagg aggaaagtaa gccagagcag tgcttggctg gcaaggccca 1800 tagcaccgga gagcaaccgc cgcagctcag cttggccacc agggtaaagc atgaatcatc 1860 ctccagtgat gaggagcgcg cagctgccaa gccatcaaac gcagggcacc tccctcttct 1920 gcctaatgtc agctacaaga agactctccg gctgacttcc gagcagctta aaagcttgaa 1980 gttgaagaat ggccccaacg acgtggtttt caagtgtcac cacgcagtac caaggcacgt 2040 geogetytty agggeaceat ctatetytyy aactyggaty ataaaaytea teatttetya 2100 tattgatggg acaattacca gatcagatac tcttggccac attttgccca cccttgggaa 2160 ggattggacc catcagggca tcgctaagct gtaccataaa gtgagccaga atggatataa 2220 atttctctac tgttctgccc gtgccatcgg gatggcggac atgacgcggg gctacctgca 2280 ctgggtcaac gagagggca cggtgctgcc ccaggggccc ctgctgctga gtcccagcag 2340 cctcttctct gccctgcaca gagaagtgat tgaaaagaag ccagaaaagt ttaaagtcca 2400 gtgtttgaca gacatcaaaa acctgttttt ccccaacaca gaaccctttt atqctqcttt 2460 tggaaaccga ccagctgatg tgtattcata caagcaagta ggagtgtctt tgaatagaat 2520 atttaccgtc aaccctaaag gagagctggt acaggaacat gcaaagacca acatctcttc 2580 gtatgtgaga ctctgtgaag tagtcgacca cgttttcccg ttgctgaaaa gaagccattc 2640 ttcagacttt ccctgttcgg ataccttcag taacttcacc ttttggagag agccactgcc 2700 accttttgaa aaccaggaca ttcattctgc ctcagcgtaa aatgtcccaa gcagcctctt 2760 gccagcagtg cagagcctgg ttgtcaccca ttaaaggata ggtctccccg gagtgcacag 2820 ctccacctgg gagcctggcg cgtcatcatt ggcctgacag cagagagaat tgagaagcat 2880 ttctcccctg ccccaccccg gggctgacat ttctaagcaa gataggaagg gagcactttc 2940 taggctagga gttgggtgca tttgtaccgt gaaaagcatt cctcagttgt ggcttaatgc 3000 cagttacgac gctgcctttc cggcctgctc cagcaagtag ctactggttc acgtgcagtt 3060

```
tggggctgtg aaacctaggc agaaggcggc tgtctgaggg ctgtccccgc ctaggacagg
                                                                     3120
gtcaatcgag gaatgccaga tgtgcacggt ttttggcaaa gtagggggca catttccatt
                                                                     3180
atagcaatgt tagtgccacc accttctgaa cacagtgggg agggctgtga aggctcatgt
                                                                     3240
gacctggatc tgaggtctcc tgatagaaat ctggacgcca ccgggtccag gcctggcctc
                                                                     3300
agacttggcc ttgtggatgg gccccttaca gtatttgctg actagtctca tttttaggtg
                                                                     3360
ataagttttt cctttaattc ctttggttaa aggatagtct atttcattgg catatctccc
cccaagtttt tgtggctcaa ggctggaata tttatgcctt aatatatcta tggcagacat
                                                                     3480
ttaagaatgc gctttatcta gctcatggta acttttgcaa cgccttagat taaaatgaca
                                                                     3540
gtaaatatta ctaaggcagt attttgaatg agtttgacac tgccggcttc cttccatcca
                                                                     3600
gcgaggtggt gctgacagtg tggacttgag cacacttatg ctaaatgata atgatactga
                                                                     3660
cttctgttgg gagctctcca aagaaactgg ttggttttaa gaaaatagtt tcaagaagtt
                                                                     3720
caactatatt cttttagata ttatgtattg ttttactctg attaggttac tgtgataggc
                                                                     3780
atttattcat attettteta taccaetgte attaatatat taaaaagatg tatgtgttag
                                                                     3840
actatcgaaa gggccttatt ctctctttct catagactga ccttcttttg gaatttctga
                                                                     3900
gtcatttatt ttccttagct ttttccactc aaattaaggg caagcgaaaa agtaataatt
                                                                     3960
tggcattett taageetaca gaatgtgatt ettteaettg tttattacae tggetegtgg
                                                                     4020
acagaacaat ttgaaaagtg aaagaattat tttggtaaaa gattttgctt tacttttcga
                                                                     4080
agcattattt ttttaaagag tgttttactc caacgattga aacattttcc tatttaaatt
                                                                     4140
tcattgttag aatcacagga ggcaaaaaat ggaacggttg aatgaaattt tactctttct
                                                                     4200
gtgaaagaaa atccacagag ttgttgcctc cgttgtagtt ggtgggcccc gttagcattg
                                                                     4260
gatgcetttg ccaaatggtt catgtggaca cacaaaggca aacagatctg ccatcgatcg
                                                                     4320
cagatttctg tagaaacacg gatgtgcatg tgcagattcc cttttgcagg tattaaaaat
                                                                     4380
aattaaaaat agtcctgcct gaggttgcag tgagccgagc ttgcactact gcactccagc
                                                                     4440
ctgggtgaca gagtaagact ccatgtcaaa aaaaaaa
                                                                     4477
```

```
<210> 6184
<211> 3060
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (288)...(2635)
<223> similar to gi1924940 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6184
tttcgtggaa ttacgcccga gtggagagtg tggaccgtga gtgtgggtat cagggagggc
                                                                       60
tggatggagg cctgtgggtg ggtgaactgc gtcctcctag ctcagccccc aggaagctga
                                                                      120
aagcccacga ggaaaaaatg tgggtgtcac tgggcaagat gggggataata ggaggcccat
                                                                      180
gcaggaggca caagagccca accaactgtc ccatttttgc cctgaccttt gccctggtag
                                                                      240
tectggeett tecegeetae etgetgggea ttgacagegg gegaetgeag gagaagetga
                                                                      300
ccagccgcaa gatggacagc cgctggggcg ggcgcagcga gtccatcaat gtgaccctca
                                                                      360
acgtggagca ggcagcctac accegtgatg ccctggccaa ggggctctat gcccgcctct
                                                                      420
tcgacttcct cgtggaggcc atcaaccgtg ctatgcagaa aaccccccag gaagagtaca
                                                                      480
gcatcggtgt gctggacatt tacggcttcg agatcttcca gaaaaatggc ttcgagcagt
                                                                      540
tttgcatcaa cttcgtgcaa tgagaagctg cagcaaatct ttatcgaact taccctgaag
                                                                      600
gccgagcagg aggagtatgt gcaggaaggc atccgctgga ctccaatcca gtacttcaac
                                                                      660
aacaaggtcg tctgtgacct catcgaaaac aagctgagcc ccccaggcat catgagcgtc
                                                                      720
ttggacgacg tgtgcgccac catgcacgcc acgggcgggg gagcagacca gacactgctg
                                                                      780
```

```
cagaagetge aggeggetgt ggggacceac gageatttea acagetggag egeeggette
                                                                    840
gtcatccacc actacgctgg caaggtctcc tacgacgtca gcggcttctg cgagaggaac
                                                                    900
cgagacgttc tcttctccga cctcatagag ctgatgcagt ccagtgacca ggccttcctc
                                                                    960
cggatgetet teccegagaa getggatgga gacaagaagg ggegeeecag cacegeegge
                                                                   1020
                                                                   1080
tecaagatea agaaacaage caacgaeetg gtggeeacae tgatgaggtg cacaeeceae
tacatccgct gcatcaaacc caacgagacc aagaggcccc gagactggga ggagaacaga
                                                                   1140
gtcaagcacc aggtggaata cctgggcctg aaggagaaca tcagggtgcg cagagccggc
                                                                   1200
ttegectace geogecagtt egecaaatte etgeagaggt atgecattet gacceegag
                                                                   1260
acgtggccgc ggtggcgtgg ggacgaacgc cagggcgtcc agcacctgct tcgggcggtc
                                                                   1320
aacatggagc ccgaccagta ccagatgggg agcaccaagg tctttgtcaa gaacccagag
                                                                   1380
tegettttee teetggagga ggtgegagag egaaagtteg atggetttge cegaaceate
                                                                   1440
cagaaggcct ggcggcgcca cgtggctgtc cggaagtacg aggaggatgcg ggaggaagct
                                                                   1500
tecaacatee tgetgaacaa gaaggagegg aggegeaaca geateaateg gaacttegte
                                                                   1560
ggggactacc tggggctgga ggagcggccc gagctgcgtc agttcctggg caagagggag
                                                                   1620
cgggtggact tcgccgattc ggtcaccaag tacgaccgcc gcttcaagcc catcaagcgg
                                                                   1680
gacttgatcc tgacgcccaa gtgtgtgtat gtgattgggc gagagaaagt gaagaaggga
                                                                   1740
cctgagaagg gccaggtgtg tgaagtcttg aagaagaaag tggacatcca ggctctgcgg
                                                                   1800
ggagtetece teageaegeg acaggaegae ttetteatee tecaagagga tgeegeegae
                                                                   1860
agetteetgg agagegtett caagacegag tttgteagee ttetgtgeaa gegettegag
                                                                   1920
gaggcgacgc ggaggcccct gcccctcacc ttcagcgaca cactacagtt tcgggtgaag
                                                                   1980
aaggaggget ggggcggtgg cggcacccgc agcgtcacct tetecegegg etteggegac
                                                                   2040
ttggcagtgc tcaaggttgg cggtcggacc ctcacggtca gcgtgggcga tgggctgccc
                                                                   2100
aagaacteca ageetaegeg gaagggaatg geeaagggaa aaceteggag gtegteecaa
                                                                   2160
gecectacce gggeggeece tgegeeceec agaggeatgg ategeaatgg ggtgeeceec
                                                                   2220
tetgecagag ggggeceet geceetggag ateatgtetg gagggggeae ceacaggeet
                                                                   2280
ecceggggee eteegteeae ateeetggga gecageagae gaceeeggge aegteegeee
                                                                   2340
tcagagcaca acacagaatt cctcaacgtg cctgaccagg gcatggccgg catgcagagg
                                                                   2400
aagcgcagcg tggggcaacg gccagtgcct ggtgtgggcc gacccaagcc ccagcctcgg
                                                                   2460
acacatggtc ccaggtgccg ggccctatac cagtacgtgg gccaagatgt ggacgagctg
                                                                   2520
agetteaacg tgaacgaggt cattgagate etcatggaag atceeteggg etggtggaag
                                                                   2580
ggccggcttc acggccagga gggccttttc ccaggaaact acgtggagaa gatctgagct
                                                                   2640
gggccctggg atactgcctt ctctttcgcc cgcctatctg cctgccggcc tggtggggag
                                                                   2700
2760
tttggcctcc agtcctgccc aggccctggg tcaccaggtc actgctgcag cccccgcccc
                                                                   2820
tgggccctgg tetteeteca acateacace tgetgeecat tetecattte tgtgtgtgte
                                                                   2880
aaaggggact aacagcagaa tctacctccc aactgccatg tgattaagaa atgggtcttg
                                                                   2940
agtcctgtgc tgttggcaaa gttccaggca cagttgggga ggggggggtc cttaacaagc
                                                                   3000
gtgactttgc tcattctgtc atcactaagg caataaacct ttgccaggtg aaaaaaaaa
                                                                   3060
```

```
<210> 6185
<211> 2175
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (245)...(1723)
<223> similar to gi2708630 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6185
                                                                       60
ccgagetccg ggcgggcggc ggctgctgca gcgggacccg ggagcggggc ccggcgccgc
ccgggccgcg gggcgatgtg agccccaggt gtatcccaga gggatccggg tgacttctct
                                                                      120
                                                                      180
gcagactgtt tgccatgaca gcccaccaag gacgggggga ataaagtggg aaccettece
catgcccctc ccacggtcag ctccccgatg gcctgggtga gggcaggctg gctgctctga
                                                                      240
caccatgggg agctgctgca gctgcctgaa cagagacagc gttccagaca accacccac
                                                                      300
caagttcaag gtgacaaatg tggatgatga gggggtggag ctgggctctg gggtgatgga
                                                                      360
gctgacgcag agtgagctgg tgctgcacct gcatcggcgt gaggccgtcc gctggcctta
                                                                      420
                                                                      480
tetetgettg eggegetatg getaegacte caacetette teetttgaga gtggeegeeg
atgtcagaca ggccagggaa tatttgcatt taagtgttcc cgggctgagg aaatcttcaa
                                                                      540
cctccttcag gatctgatgc actgcaacag catcaatgtg atggaagagc ctgtcatcat
                                                                      600
caccegeaat agecaceeeg etgagettga cetecetega geceeeeage cacceaatge
                                                                      660
tetaggetae aetgteteea getttteeaa tggetgeeet ggagagggee caegattete
                                                                      720
ageteeeegg eggetetega caageageet geggeaeeee tegettgggg aagagteeae
                                                                      780
ccatgccctc attgctcctg atgagcagtc ccacacctat gtcaacacac cggccagtga
                                                                      840
agatgaccac cgcaggggcc gccactgcct gcagcccctg cctgagggtc aggcaccctt
                                                                      900
cetecegeag geceggggae etgaceaacg ggacecacag gtgttettge agecaggeca
                                                                      960
ggtgaagttt gtgttgggcc cgacccctgc tcggcggcac atggtgaagt gccagggcct
                                                                     1020
ctgtcccagc ctgcatgacc ccccacacca caataataac aatgaggccc cttctgagtg
                                                                     1080
tecageceag eccaagtgea ectaegagaa egteaeeggg gggetgtgge gaggggetgg
                                                                     1140
ctggagactg ageccagagg agecgggetg gaatggeett geccaeegee gggeegeeet
                                                                     1200
gctgcactat gagaacctgc ccccactgcc ccctgtgtgg gaaagccaag cccagcagct
                                                                     1260
gggagggag gctggggatg atggggactc gagggatggg ctcacaccct cttccaatgg
                                                                     1320
ettecetgat ggtgaggagg acgagaccc actgcagaag cccaccagca cccgggccgc
                                                                     1380
catccgcagc cacggcagct ttcctgtgcc actgacccgc cgccgcggct ccccaagggt
                                                                     1440
cttcaacttt gatttccgcc ggccggggcc cgagcccca aggcagctta actacatcca
                                                                     1500
ggatgaaget aaagggetgg ggtggagace geeetaaggg geeeegagaa eeeetegage
                                                                     1560
ccccaagece ccatgeceae cacceaecet geeegaaget cagaeteeta egeegtgatt
                                                                     1620
gaceteaaaa agacegtgge catgteeaac etgeagagag etetqeeeeg agacgatgge
                                                                     1680
accgccagga aaacccggca caacagcacc gacctgcctc tgtagggact tcccggtcct
                                                                     1740
caccaccete tgecceacea tgatecagee tetgeeteae acteetgtee tetgaaceea
                                                                     1800
ccctccccag ggttcagggt tgctttgcag aaggcatgga ggtgggacca gatgcttccc
                                                                     1860
tgtgctggct ggagtcccca gagatatcag ccaccgagtc tcctggtctg tctccaggct
                                                                     1920
gggaagagaa gggtgaccag gcgaggaggg agccgagacg tcaactgtga agggttcctg
                                                                     1980
tgattgcgtt tagcgccctc ccgttctgtc catttgtctt gtctgccgac tgtccgtgtg
                                                                     2040
tgtttttttt ggttggaatt ttgaaacatt ttgtacctgt tgattttatt tatcagttta
                                                                     2100
tttttctatt tattgtttta aatgtaattt aacatattta ttattaatat aattattttt
                                                                     2160
aaattttgaa aaaaa
                                                                     2175
```

```
<210> 6186
<211> 3201
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3202)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3073)...(426)
<223> similar to gi4868008 in the genepept database release 114,
```

```
<400> 6186
ttttttttt ttgggcgcag agggcgttta ttggacctgt ccttcccagc cgctgcttgt
                                                                       60
ccaggttcag cgctctccgc gggtgaggca aggaaaccga ggagacgccc gagccgggtc
                                                                      120
accacaaggt ccgcctggac ccccggccgt cacggacggt cctctggatg cagatggtcc
                                                                      180
agggatctgg gggtcctggg agagtggtgt gtggactgcg ggcccagctg gacaaaggca
                                                                      240
ggggetteet cagaagetet getggteacg caggegteeg geecaeggee tteaacagee
                                                                      300
ctgcagggcg ggctgaggtt aaccgcgccg aggagagtcc agggcgagcg gtggctcttg
                                                                      360
cagcagccgg gctcaggggc agctgagggg tagctgagga gtagctgagg ggcagctggg
                                                                      420
ctcaggggta gctgaggggc acccgccacc agagcccacc gcacaggcag ttcttgatcc
                                                                      480
agegetgete ecaetgette acegeegtgg ttetgttggg egaettgage atggtgacae
                                                                      540
agccgcacct ggtgcaggcc ttgcattcct ccgtggggca agcgccaagg tgcagcctcc
                                                                      600
gcaggtggtc gatcttgggc tggcctgggg ccctggcgag gccgtcgagc tgcaqqqtqq
                                                                      660
cagcactgcc aggcagcgtg ggcgcccggc caaactgcag acgaaggggc tgcttgggct
                                                                      720
gcaggcggct aaccaggccg tcgctggctg gcagccagtc caggctgggg ataagcagct
                                                                      780
ggctgggcag caggcagcat tcatccacca gcgcctcgtc cggctcgctc gctgggccct
                                                                      840
catcgcgaca gcagatccag agcttggtga gcaggcggaa gagcagggac atgctgtcct
                                                                      900
gggtateega ggtggeegta tacaegggea ggeagetggg etteagaagg eeceagatge
                                                                      960
ggatgaccac catcaattcc cgaagcatgc ccagcgaggt gccgtcccgc aggaagctgt
                                                                     1020
ggcccggcct cagcagggaa ccagcagagg cttcatggag aggagggctc cgaggtgggg
                                                                     1080
gagggctccg aggtggggga gggctccgag gtggggcagg gctccgaggt ggggcagggc
                                                                     1140
tggttgggta ggctggccag caggtacagc acgaagtcgc ccacccactg caagagctgc
                                                                     1200
tgcagcgcct gcagtgtgtt catgtccagc acaaattcct ccgtcttgag gttgatcatg
                                                                     1260
accttgtcaa tgtcgacgtc ggtgatcttg gtgcagatct cggtcagccg gtcgccgggg
                                                                     1320
ctcttgtcag gcgtgttgag aaagtggggg cgcagcagcg acttcagggt ggaqctqatq
                                                                     1380
gcgatgagga agagcttggt gtggtagtcg cacacgcggg tcaccgtgca gggcgacagc
                                                                     1440
ttgcagagcg aggccttcat ggccaggatc cgggtggaga ggacctgctg cagggcagcg
                                                                     1500
gtctggcgcg tgtactcctc gtgcagcttc tccaccaggc tctgtaccat actgggctgc
                                                                     1560
acgtgcagca ggatgtccca ccagtcgtag ccggtcacca tgcagtactc cagcaggaag
                                                                     1620
agcaggtgcc gcagcgccag ccccacctcc agcgggtggc ccatggaagg tgagaggcgg
                                                                     1680
agccacgctc agcttcccgt ggctgtcaat ccccaccagg gccagtgacg tccacgatag
                                                                     1740
ctgcatagcc tttaagtgga cggcggggcc cgcggtgcgg gggcgcttca tggccggctc
                                                                     1800
atccacagge eteggggeeg eggagetgta gaagacegee atggtetgea gtgagageeg
                                                                     1860
gtgcacgatg tggacgctgc cgtcgtggaa ggccagggcc agcccgaggc cagggtagaa
                                                                     1920
ctgtgtgtcg ctggccacct tgaggtcggt gttggtgagc gagatgggca gcttgggcag
                                                                     1980
cgcccacggc cgacacacgg tccagatcgt tggtggccga taggatccgc catttgagaa
                                                                     2040
ttgtgggctg tttgtcgcca accacggggg agatctgctg gaagatgttg ttcacgggga
                                                                     2100
gtccctcctt gcgcagggac cagcactcca cgatgctgct ggtctggctg gacgcgcaca
                                                                     2160
aaagcacctg ctccgacatg tcccgggcca ggaacttgag gtgggtgatg gcggggaact
                                                                     2220
tgtccttgcg gttgaggtcg gtggtgcagc gcatgaacag ggagggcagg atatccgtgt
                                                                     2280
cgatacggca cttctcgctc accacgctca cgcacacctt gtagaactgc acgggcgtac
                                                                     2340
gcgctgctgc cgtccgccgt ggccaccacg atgttgccgc cgccggtgaa ggcgatgtcg
                                                                     2400
gccagggcca cgcgggcgcg cagccggcac aggctcatcg gtggacgtcg agcacctgcc
                                                                     2460
cgctggcgtt ncagcaggga cacggtgacc aggccgctga ccgtcaccgc gatccagccc
                                                                     2520
tccatggcat tgccgcacga acagcgtgag cgacgggtga gaacttgact ccgggagaac
                                                                     2580
ttctccccga agctggaggc gcccgacttc tccacgtgca gggccagttt cacaccattt
                                                                     2640
gtgcagccag ggacagggcc cacaaatggg gtcccccctc cactaaggct gcccactgag
                                                                     2700
cttctcccag ctattaagcc agggtnggta cccccatgct ccagcacctt gatctgcccc
                                                                     2760
gtcggccatc tgctgaacag gaagccgggg aagcctgact ggtcccactc cagggcaggt
                                                                     2820
gatagecteg tggtgetetg aggggatega gtgeaggtee caggggtget cegtgtecag
                                                                     2880
gatgtggatc atgcgggtca ggtcctggtc atcgctgcgc aggtccatgg tgaaggcgat
                                                                     2940
gagatttcgg caggaccagg cgcaggccag gggcaccgat gggcagtggg tgctcttgga
                                                                     3000
ccatttctcc cactcacaga cgtaggccaa gtccatcatc ccacctgccg ctggccgccg
                                                                     3060
```

```
caaatcacac atgagggcag tcaccagctc ctggtcggcc cgtgcgccaa gctcagcggg 3120 cgtccgcggt gcgatcttcc ctagcgcctc gggtctggcg ccgccatctt cctcggtaac 3180 aaccagtcgc ttgaggcgtg g 3201
```

```
<210> 6187
<211> 1285
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1252)...(386)
<223> similar to gi4867999 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6187 ttttttcaca tttctttaca tttaatgtaa ataccaacag tggtcaccta tcaacatcat 60 ggaagagcac acttcacagg tttcataatc aaattttaaa ataatcacat qtaataaaaa 120 caaatgacta aaatacaaaa atgtaatgta tttatttact aaatggttag ctataaagat 180 acaatttctg ccttggagtt taaagcagtt tcattttttg ccatagttac tttttctgat 240 aatatgctag aatcacagtc ttctctgttt tatctggatt gtagggattg tttacatttt 300 atatggtttg ttcacttgag aaccaaattt tttttttctt catgatgatg gaagctctgt 360 aatataaaaa tgtcattgtg ctcatatatt tgaataatac ccgaccccgg ttttcaaagt 420 ctctgtgagc atatcttgca taagtcttgt tatgtgggga tccttccaaa aggttcatgg 480 tcattgaaac aggattcaaa aacttcatca acagcctttt tagctacttc tttgctgata 540 ttcctaacag ccaggataga aagagtggct ctgtctcgca cacaagtctg gtggtgttgt 600 tttaatccaa aatgtaacct gaatatttca ttgacaagtg agcagtctcc actaaggtta 660 gcagctcgaa cctctgagca cgccaaatgt ctgatgttgg tgaaccagtc gacatgggca 720 cgacaatgat caaatgcatg aataagctcg tgtgtgacca ctctgttcat atgggcctga 780 ttatggatat tattctggca caaaactatc tgagatgttg aagcatcaaa acctccactg 840 acatttccat tacagtcttc gcaagaaaag tgtctatctt tgttaacagc acaacctgag 900 tgtttcatag catcaagcag aagtttgaca tatggatttg tctccagcgt cttcaggagc 960 ctaagctggc acttctggtt gctggtgaag aagctggaga agaacccttg ctggggattc 1020 ccctgggcca gacgctcggg gaagacctgg caagagacgt gttgctgctg cagctgctcc 1080 cetgeegegg ggeeeegeeg gegetegtee ggageteeeg ceatgeetee egeagacete 1140 gccgctgctt cctcctggct caggcggcca gagcgagact gggaaaggta acctccctcc 1200 1260 aagacgttag gcgggagggg gcttt 1285

```
<210> 6188
<211> 2358
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (140)...(1585)
<223> similar to gi3378168 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6188
tggacgagac cccgaggggg aagcggcggc tgattcaggg tcgcgcctcc gttggaaact
                                                                       60
tgggetgaat accgeggegg gegegagega ggegeectag acatettete cetecettge
                                                                      120
ctcagattta ttgctaaaca tgggtgcatt tttggataaa cccaaaactg aaaaacataa
                                                                      180
                                                                      240
tgctcatggt gctgggaatg gtttacgtta tggcctgagc agcatgcaag gatggagagt
ggaaatggaa gatgcacaca cagctgttgt aggtattcct cacggcttgg aagactggtc
                                                                      300
attttttgca gtttatgatg gtcatgctgg atcccgagtg gcaaattact gctcaacaca
                                                                      360
tttattagaa cacatcacta ctaacgaaga ctttagggca gctggaaaat caggatctgc
                                                                      420
tcttgagctt tcagtggaaa atgttaagaa tggtatcaga acctgggatt tttgaaaatt
                                                                      480
gatgaataca tgcgtaacct tttcagacct cagaaaccgg gatggacaag gagttggttc
                                                                      540
aactgccagt tggaagttat gatttcacct aagcatatct actttatcaa ctgtggtgat
                                                                      600
tcacgtgctg ttctgtatag gaatggacaa gtctgctttt ctacccagga tcacaaacct
                                                                      660
tgcaatccaa gggaaaagga gcgaatccaa aatgcaggag gcagcgtgat gatacaacgc
                                                                      720
gttaatggtt cattagcagt atctcgtgct ctgggggact atgattacaa gtgtgttgat
                                                                      780
ggcaagggcc caacagaaca acttgtttct ccagagcctg aggtttatga aattttaaga
                                                                      840
gcagaagagg atgaatttat catcttggct tgtgatggga tctggggatgt tatgagtaat
                                                                      900
gaggagetet gtgaatatgt taaatetagg ettgaggtat etgatgaeet ggaaaatgtg
                                                                      960
tgcaattggg tagtggacac ttgtttacac aagggaagtc gagataacat gagtattgta
                                                                     1020
ctagtttgct tttcaaatgc tcccaaggtc tcagatgaag cggtgaaaaa agattcagag
                                                                     1080
ttggataagc acttggaatc acgggttgaa gagattatgg agaagtctgg cgaggaagga
                                                                     1140
atgeetgate ttgeecatgt catgegeate ttgtetgeag aaaatateee aaatttgeet
                                                                     1200
cctgggggag gtcttgctgg caagcgtaat gttattgaag ctgtttatag tagactgaat
                                                                     1260
ccacatagag aaagtgatgg ggcctccgat gaagcagagg aaagtggatc acagggaaaa
                                                                     1320
ttggtggaag ctctcaggca aatgagaatt aatcataggg gaaactaccg acaacttctg
                                                                     1380
gaggagatgc tgactagtta caggctagct aaagtagagg gagaagaaag ccctgctgaa
                                                                     1440
ccagctgcca cagctacttc ttcgaacagt gatgctggaa acccagtgac aatgcaggaa
                                                                     1500
agccatactg aatcagaaag tggtcttgct gaattagaca gctctaatga agatgcaggg
                                                                     1560
acaaagatga gtggtgaaaa aatatgactt tcctttttgg taatattttt gtgatctttg
                                                                     1620
atggttttta acctaggaag tgtaatgtat gcatttatat aactgttttg ttatttgaat
                                                                     1680
cttggaaaac tagttttatt atattcagat agccttgttt tttaaaaagg cctttgcata
                                                                     1740
cacctttatg agatagtgta aaattgacta tttatagtac tatggattta atgaaattat
                                                                     1800
atgicattic acattgiatg ccagaaatta ggctaccaat tatgaattaa aqtcaqtaqt
                                                                     1860
taaattaata ctagatagaa ttagaaattt tgattagaga qattatgcta tattatggaa
                                                                     1920
aaacttgtta atgtagaatt atactgcttc atattatttt acctattaqt acactcataq
                                                                     1980
ttagcttggt aaataaattt aggttttctt taataatttt agttcttcaa agaatgggct
                                                                     2040
gatgetggcc tgtaattttt etttecaagg atgataattt gtgtgttgtt tgatttqttt
                                                                     2100
atattttaca tctctgtagg ttttattttt agaagttgtg agatatttgg gatgtgtggg
                                                                     2160
ctatttttcc tttctctgta ttctttatga aaccataact ttttgaaaaa cctatgtatt
                                                                     2220
attcatacag ctttgggttt gtatattctg tataggccta acttacacac atccaaaatg
                                                                     2280
tatgtcaacc aagtgtttag aatgaaatta taagtgttta agtccaaata aagcatgtga
                                                                     2340
tgtggaataa aaaaaaaa
                                                                     2358
```

```
<210> 6189
```

<211> 3622

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (318)...(2733)
<223> similar to gi38032 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6189 tecaggiete gaetteaetg etetgigtee tetgeteeag gaggeeeage etgigtggee 60 ctgtgacctg caggtattgg agagccacag ctaagatgcc aggaacccct gcaagcctag 120 aaatgagcct tctctgcatg atggcttctt atatgccatg cagaattctc accatgaatt 180 tgtgatctgc aatattaaaa atgttctctt tgtggctgtt gaacatggaa aggtgtggat 240 aatctatttc tatggagaaa acctgggatt cttagtgaag atggagaaca tataatgttg 300 agggaccatt gacatttatg gatgtggcca tagaattctg tctggaggag tggcaatgcc 360 tggacactgc acagcagaat ttatatagga atgtgatgtt agagaactac agaaacctgg 420 tetteetggg tatattgetg tetetaagee agacetgate acetgtetgg ageaagaaaa 480 agageettgg gageetatga ggagacatga aatggtagee aaacccccaq ttatqtqtte 540 tcattttacc caagactttt ggccagagca gcatataaaa gatcctttcc aaaaagcgac 600 actgagaaga tataaaaact gtgaacataa aaatgtacat ttaaaaaaaag accataaaag 660 tgtggatgag tgtaaggtgc acagaggagg ttataatgga tttaaccaat gtttgccaqc 720 tacccagage aaaatattte tatttgataa atgtgtgaaa geettteata aatttteaaa 780 ttcaaacaga cataagataa gccatactga aaaaaaactt ttcaaatgca aagaatgtgg 840 caaatcgttt tgcatgcttt cccatctagc tcaacataaa ataattcata ccagagtgaa 900 tttctgcaaa tgtgaaaaat gtggaaaagc ttttaactgc ccttcaatca tcactaaaca 960 taagagaatt aatactggag agaaacccta cacatgtgaa gaatgtggca aagtctttaa 1020 ttggtcctca cgccttacta cacataaaaa aaattatact agatacaaac tctacaaatg 1080 tgaagaatgt ggcaaagctt ttaacaagtc ctcaatcctt actacccata agataattcg 1140 cactggagag aaattctaca aatgtaaaga atgtgccaaa gcttttaacc aatcctcaaa 1200 ccttactgaa cataagaaaa ttcatcctgg agagaaacct tacaaatgtg aagaatgtgg 1260 caaagcettt aactggeeet caactettae taaacataag agaatteata etggagagaa 1320 accetacaca tgtgaagaat gtggcaaage ttttaaccag ttetcaaace ttactacaca 1380 taagagaatc catactgcag gagaaattct ataaatgtac agaatgtggt gaagctttta 1440 gccggtccct caaaccttac taaacataag gaaattcata ctgaaaagaa accctacaaa 1500 tgtgaagaat gtggcaaagc ttttaagtgg tcctcaaagc ttactgaaca taagttaact 1560 catactggag agaaacccta caaatgtgaa aaatgtggaa aagcctttaa ctgcccttca 1620 atcatcacta aacataacag aattaatact ggagagaaac cctacacatg tgaagaatgt 1680 ggcaaagtct ttaattggtc ctcacgcctt actacacata aaaaaaatta tactagatac 1740 aaactctaca aatgtgaaga atgtggcaaa gcttttaaca agtcctcaat ccttactacc 1800 cataagaaaa ttcacattga aaagaaattc tacaaatgtg aagaatgtgg caaagctttt 1860 aagtggtcct caaagcttac tgaacataag ataactcata ctggagagaa accctacaaa 1920 tgtgaagaat gtggcaaagc ttttaaccat ttctcaatcc ttaccaaaca taagaggatt 1980 catactggag agaaacccta caagtgtgaa gaatgtggca aagcttttac ccaatcctca 2040 aaccttacta cacataagaa aattcatact ggagagaaat tctacaaatg tgaagaatgt 2100 ggcaaagctt ttacccaatc ttcaaacctt actacacata aaaaaattca tactggagga 2160 aaaccctaca aatgtgaaga atgtggcaaa gcttttaacc agttctcaac tcttactaaa 2220 cataagataa ttcacactga ggagaaaccc tacaaatgtg aagaatgtgg caaagccttt 2280 aagtggteet caaccettae taaacataag ataatteata etggagagaa accetacaaa 2340 tgtgaagaat gtgggcaaag cttttaaact gtcctcaacc ctttctacac ataagattat 2400 tcatactgga gagaaaccct acaaatgtga aaaatgtggc aaagctttta accgaccctc 2460 aaaccttatt gaacataaga aaattcatac tggagagcaa ccctacaaat gtgaagaatg 2520 tggcaaagca tttaactatt cctcacacct taatacacat aagagaattc atactaaaga 2580 gcaaccctac aaatgtaaag aatgtggcaa agctttcaac caatattcaa accttactac 2640 acataacaaa attcatactg gagagaaact ctacaaacct gaagatgtga cagtgatttt 2700 gacaacacct caaacttttt caaacataaa ataaattata ctggtgagaa attctagaaa 2760

```
tgtaaagaat gtgataaagg ctttacatgg ttgtcacact tgattgtagg taagataatt
                                                                     2820
                                                                     2880
tacattggag taaacttcta caagtgtgaa gaatgtggca aaacttttaa ttaatgctca
taccttattg cacaggaaag aatttttact tggaaaaagg tatatacaca aagaatgtgg
                                                                     2940
aaaagccatt aatatgtgct catatcttac tcaacatcag agagtctgta cttaataaaa
                                                                     3000
ccattataga tgcaactagt gtcaaaagat ctttcagaaa ataaaagcct ttaaagtgaa
                                                                     3060
gaagataatt cattetgaag acaaacatta caaatattaa gagggttgta gtaccattac
                                                                     3120
ttgcatcaca gatcttattg tacacatttt gtactaaaga aaaccctgaa gcagttgctc
                                                                     3180
aaatactgtt caacatcaga aaatttatat tggaaaaaac ccctggaaaa tgtaataaat
                                                                     3240
ttgtaaaaac agttttgaaa aactacagct tataaaacat gagggtctat aatgcttggt
                                                                     3300
tgatagtaca aagtttattc aacatcaggg aatttatatt ggagaaaaac cctacaaatg
                                                                     3360
taatcagttt ggaaaaacat ttttaaaaaaa accacagcat agaaaacacc acagggttca
                                                                     3420
tactaaaata tgtttttgca gatgcagtaa aaatgaaaaa aatttaatcc gaaattaagt
                                                                     3480
ttatgtaaat atctgagaat tcacagtaga aatatctaag gcgcggacac ttcagacatt
                                                                     3540
acactaaatc agtgctaagt acagaaaaca acacaaaata aaacttggtg ggattaaatt
                                                                     3600
atttgtatat aacattaaaa gg
                                                                     3622
```

```
<210> 6190
<211> 2316
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (134)...(2317)
<223> similar to gi38079 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6190 tttccgttct cttggcccgg ctgacagagt tagccgaggc cgccatattg aataagcgac 60 ceggeeteet agggggtegt egtggtgeag acagtttage agaacageet eegeggetee 120 ggggagaagc aatatgttaa ggatacctgt aagaaaggcc ttagtaggcc tttctaagtc 180 tcctaaagga tgtgttcgaa caactgccac agcagcaagc aacttgattg aagtatttgt 240 tgatggtcag tctgtcatgg tggaaccggg aacgaccgtc ctccaagctt gtgagaaggt 300 tggcatgcag atccctcgat tctgttatca tgaaaggttg tctgttgctg gaaactgcag 360 gatgtgcctt gttgaaattg agaaagcccc taaggttgta gctgcttgtg ccatgccagt 420 aatgaagggt tggaatatcc taacaaactc agaaaaatcc aaaaaagcca gggaaggtgt 480 gatggagttc ttattagcaa atcacccatt ggactgtcct atttgtgacc agggaggtga 540 atgtgatctg caggaccagt ccatgatgtt tggaaatgat aggagccgat ttttagaqqq 600 gaagcgtgct gtggaagaca agaacattgg gccattggta aagaccatca tgacaagatg 660 tatacagtgt actcgctgca tcaggtttgc aagtgagatt gcaggagtag atgatttggg 720 aacaacaggc agaggaaatg atatgcaagt tggcacatac attgaaaaga tgttcatgtc 780 tgaactgtct gggaatatca ttgatatctg ccctgtaggt gccctaacct ctaagcccta 840 tgcctttact gcccggcctt gggaaacaag aaagacagaa tccattgatg taatggatgc 900 ggttggaagt aatattgtgg ttagcacaag aactggagaa gtgatgagga ttttgccacg 960 tatgcatgag gacatcaatg aagagtggat ctctgataaa accagatttg cctatgatgg 1020 gctaaaacgt caaagactta ccgagccaat ggtcagaaat gaaaaagggc ttttaaccta 1080 tacttettgg gaggatgege tetetegegt agetggaatg ttgcagagtt ttcaaggeaa 1140 agatgtggca gcaattgcag gtggcttggt ggatgctgaa gccctggtag ctctcaaaga 1200 tttgcttaat agagtggact ctgacacctt atgcactgaa gaggtcttcc ccactgcagg 1260 agctggcaca gatttgcgtt ccaattatct tcttaatact acaattgctg gtgtggaaga 1320

```
ggcagatgtt gttcttctgg ttggtacaaa cccacgtttt gaggcaccac tgtttaatgc
                                                                     1380
tagaattega aagagetgge tgeataatga ettaaaagtg geeettatag geagteeagt
                                                                     1440
ggacctcact tacacatatg accacctggg agactccccc aaaattcttc aagacattgc
                                                                     1500
ttcgggaagc catccattta gccaggtcct aaaggaagct aaaaaaccaa tggtggtttt
                                                                     1560
aggcagttct gcactccaaa gaaatgatgg agcagcaatt cttgcagctg tttctagcat
                                                                     1620
tgcacaaaag attcggatga ctagtggtgt tactggtgat tggaaagtta tgaatatcct
                                                                     1680
tcataggatt gcaagtcaag tagctgcttt ggaccttggc tataagcctg gggtggaagc
                                                                     1740
aattcggaag aaccctccca aggtgctgtt tctcctggga gcagatggag gttgtatcac
                                                                     1800
acgacaggat ttgccaaagg attgtttcat tatttatcaa ggacatcatg gtgatgttgg
                                                                     1860
ggctcccata gctgatgtta ttctcccagg agctgcttac acagagaagt ctgctacata
                                                                     1920
tgtcaacact gagggtagag ctcagcagac taaggtagca gtgacacctc ctggcttggc
                                                                     1980
aagagaagac tggaaaatta taagagcact ctctgagatt gctggaatga ctcttccata
                                                                     2040
tgatactetg gaatcaagta aggaacagat tggaagaagt eteteecaat ettgttegat
                                                                     2100
atgatgatat tgaagggggc taattacttc cagcaagcaa atgagctctc aaagctagtg
                                                                     2160
aaccagcage ttettgetga eccaettgtt ecaeeteage taaetatgaa agaettetae
                                                                     2220
atgacagatt caattagcag agcttcacag acaatggcca aatgtgtcaa agctgtcaca
                                                                     2280
gagggtgccc aggcagtaga ggaaccatcc atatgc
                                                                     2316
```

```
<210> 6191
<211> 1578
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (99)...(660)
<223> similar to gil841436 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6191 cgcggccgcg tcgacgccag tctagctgct gcacaggctg gctggctggc tggctgctaa 60 gggctgctcc acgcttttgc cggaggacag agactgacat ggaacagggg aagggcctgg 120 ctgtcctcat cctggctatc attcttcttc aaggtacttt ggcccagtca atcaaaggaa 180 accacttggt taaggtgtat gactatcaag aagatggttc ggtacttctg acttgtgatg 240 cagaagccaa aaatatcaca tggtttaaag atgggaagat gatcggcttc ctaactgaag 300 ataaaaaaaa atggaatctg ggaagtaatg ccaaggaccc tcgagggatg tatcagtgta 360 aaggatcaca gaacaagtca aaaccactcc aagtgtatta cagaatgtgt cagaactgca 420 ttgaactaaa tgcagccacc atatctggct ttctctttgc tgaaatcgtc agcattttcq 480 accttgctgt tggggtctac ttcattgctg ggacagggat ggagttccgc cagtccgaga 540 gcttcagaca agcagactct gttgccccaa tgacccagct cctacccagc ccctcaagga 600 teegaggaag atgaceeagt acageeaeet teaaggaaae eeagttgagg aggaattgaa 660 ctcaggactc agagtagtcc caggtgttct cctcctattc agttcccaga atcaaagcaa 720 tgcattttgg aaagctccta gcagagagac tttcagccct aaatctagac tcaaggttcc 780 cagagatgac aaatggagaa gaaaggccat cagagcaaat ttgggggttt ctcaaataaa 840 ataaaaataa aaacaaatac tgtgtttcag aagcgccacc tattggggaa aattgtaaaa 900 gaaaaatgaa aagatcaaat aaccccctgg atttgaatat aattttttgt gttgtaattt 960 ttatttcgtt tttgtatagg ttataattca catggctcaa atattcagtg aaagctctcc 1020 ctccaccgcc atcccctgct acccagtgac cctgttgccc tcttcagagc aagactgtgt 1080 cttaggaaaa aaaaaattat gcgtctaaag ataccattaa cttaaaaaaa caaaaaaggt 1140 cacttcacct gattgtctga gggggaaaaa attaaaaaaa taataatcgg aaaaggccag 1200

```
ggaccatgac ctatacctgt agtctcaact acttgggagg ctgaggcagg aggatcactt 1260
aagcccagaa gagcaaatct agcctgactg gtgtttctgg caagactcca actctaattt 1320
aaaagataga aaagaaagaa aatgaaaaga caggacacag actgggagaa agtatttgca 1380
ggtcatatat ctaataacag tgcttctctc aagagtatat agaaagctct tagaattaat 1440
aatgagaaga caattaaacg aacaaaaatg ggctgaagtc ttggatagac atttcaccga 1500
agacatagga atggcaaata agcataagaa aaggtattta caccaggtgc ggtggctcac 1560
catgtgtgca atcccagc
```

```
<210> 6192
<211> 3282
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(2775)
<223> similar to gi1469874 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6192 gtgcgctcag gcggcgctcc cggagatgcc ccgcggcagc cgcgctcggg gctctaagag 60 aaaaaggagt tggaatacag aatgcccatc ctttccagga gaaagaccac tgcaggtcag 120 aagagcaggt ctcaggacag caggggcagc tgcctctctc tctgaagcat ggctcaggtg 180 tggagaaggg tttcagaaca cttctgggaa tccgtcatta acagctgaag agaagacgat 240 tacagaaaag caccttgaat tatgccctag acccaagcaa gaaaccacca catctaaaag 300 caccagtggg cttacagaca taacatggag ctccagtgga agtgatttgt cggatgaaga 360 taagacactt tctcagttac agagagatga attacagttt atcgactggg agattgacag 420 tgacagggca gaggctagtg actgtgatga atttgaagat gacgagggtg ctgtggaaat 480 ctcagactgt gcttcttgtg caagtaatca gtctttgaca agtgatgaga agctgtcgga 540 gcttcccaag ccaagttcta tagaaatttt agagtattca tcagatagtg aaaaagaaga 600 tgatttggaa aatgtcctac tcattgattc agaatcccct cacaaatacc acgtgcagtt 660 tgcatcggat gcaagacaga ttatggagag actgatagat ccaaggacaa aatcaacaga 720 gaccattttg catacacctc agaaacccac agctaagttt cccaggactc cagaaaattc 780 agcaaagaag aagcttttaa gaggtggact agcagaaaga ctaaatggac tgcagaatcg 840 agagagatet getatttett tgtggagaca teaatgtatt tettaccaaa agacaettte 900 aggtagaaaa tctggtgtat taactgtgaa aattttagag ctgcatgagg aatgtgccat 960 gcaagttgcc atgtgtgagc agttattggg gtcaccagcc accagctcct cccaaagtgt 1020 ggctcccagg cctggagctg gcctgaaagt tctcttcacc aaggagactg caggctacct 1080 caggggccgt ccccaggaca ctgtccggat cttccctccc tggcaaaaac tgattattcc 1140 aagtggaagt tgccctgtta ttctgaatac ttacttttgt gagaaagttg ttgccaaaga 1200 agattcagaa aaaaacttgt gaagtgtact gtccggacat accccttcca agaagaagca 1260 tctctttggc ccagatgttt gtaattaagg gtctaacaaa taattcacct gaaatccagg 1320 ttgtgtgtag tggtgtagcc actacaggga cagcctggac ccatgggcac aaagaagcaa 1380 aacagcgcat cccaaccagc actcccctga gggattctct cctggatgtg gtggaaagcc 1440 agggagetge etegtggeea ggagetggag teegagtggt ggtgcaaaga gtgtattete 1500 ttcccagcag agacagcacc aggggtcagc agggggccag ctcaggacac acagacccag 1560 ctggaactcg agcctgcctt ctggtacaag atgcctgtgg aatgttcggt gaagtgcact 1620 tggagttcac catgtcgaag gcaagacagt tggaagggaa gtcttgcagc ctggtgggaa 1680 tgaaggttct acagaaagtc accagaggaa ggacagcggg gattttcagt ttgattgaca 1740 ccctgtggcc cccagcgata cctctgaaaa cacctggccg cgaccagccc tgtgaagaga 1800

```
taaaaactca totgootoot coagoottgt gttacatoot cacagotoat ccaaatotgg
                                                                   1860
gacaaattga tataattgac gaagacccca tttataagct ttaccagcct ccagttaccc
                                                                   1920
gctgcttaag agacattctc cagatgaatg atcttggtac ccgttgcagt ttctatgcca
                                                                   1980
cggtgattta ccaaaaacca cagctgaaga gtctgctgct tctggagcaa agggagatct
                                                                   2040
ggctgctagt gaccgatgtc actctgcaaa cgaaggagga gagagacccc aggctcccca
                                                                   2100
aaaccetget ggtetatgtg geeceettgt gtgtgetggg etetgaagte etggaggeae
                                                                   2160
tegetgggge tgecceteae agectettet teaaggaege teteegtgae eagggtegga
                                                                   2220
ttgtttgtgc tgaacgaact gtcctcttgc ttcagaagcc ccttttgagt gtggtctctg
                                                                   2280
gtgcaagtte ctgtgagetg cetggeeegg tgatgetega cageetggae tetgeaacae
                                                                   2340
ctgtcaactc catctgcagt gttcaaggca ctgtggttgg cgtggacgag agcactgctt
                                                                   2400
tctcatggcc tgtgtgtgac atgtgtggca acgggagatt ggaacagagg ccggaagaca
                                                                   2460
gaggcgcctt ttcctgtggg gactgctccc gggtggtcac atctcctgtt ctcaagaggc
                                                                   2520
acetgeaggt etteetggae tgeegeteaa gaeegeagtg eagagtgaag gteaagetgt
                                                                   2580
tgcagcgcag catttcctcc ctgctgaggt ttgccgccgg tgaagatggg agctacgaag
                                                                   2640
tgaagagtgt cctcggaaag gaagtggggt tgctaaattg ttttgtccag tccgtaaccg
                                                                   2700
eccaccegae cagetgeatt ggattggagg aaategaget tetgagtgea ggaggggeet
                                                                   2760
cctgccagaa cactagccgg ttgccgcagg atctgtgaac tttgcaatgt ggcctgccaa
                                                                   2820
ggggtggtgg gtggtggtgg tgattggggg gtaggttatt gggttaacct atgggaccc
                                                                   2880
agtgaaccgt aggtttacgg atcttggaaa ggaaacttta gatttttctg gggaaatgtt
                                                                   2940
ccagatacca gttttgtgaa ctgttaaatc aaaataccct ttttcctaca gtttatcttt
                                                                   3000
tattttcctg caaatttaag gaacatattt actccgtttt ccacattgaa tccttaagtt
                                                                   3060
ttaaactcct tcatttggta tttaaggcca atatatgagg aaaaaaattt ttttttgttc
                                                                   3120
atttgtaatt ttaacaagtt gaacatttta ccatgattga acatgttttt attacagtat
                                                                   3180
ttaacattcc cccaaagaat accctgcaaa gtgtaaacct ttgtcccata ctgtgatatt
                                                                   3240
3282
```

```
<210> 6193
<211> 5825
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (39)...(1263)
<223> similar to gi3327100 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6193
cccacgcgtc cgatcgtcga gcgctgggcc tgtgatcgct gaggggcgag cagttgcgac
                                                                       60
cctgggctcc tggggacctg agcgttatgt ctttccgcga cctccgcaat ttcacagaga
                                                                      120
tgatgagagc cctgggatac cctcgacata tttctatgga aaatttccgt acacccaatt
                                                                      180
ttggacttgt atctgaagtg cttctctggc ttgtgaaaag atatgagccc caqactqaca
                                                                      240
tecegeetga egtggataet gaacaggace gagttttett cattaaggea attgeecagt
                                                                      300
tcatggccac caaggcacat ataaaactca acactaagaa gctttatcaa gcagatgggt
                                                                      360
atgcggtaaa agagctgctg aagatcacat ctgtccttta taatgctatg aagaccaagg
                                                                      420
ggatggaggg ctctgaaata gtagaggaag atgtcaacaa gttcaagttt gatcttggct
                                                                      480
caaaagattg cagattttga aggcagccag gcagcttgcg tcctgaaatc acctccaaag
                                                                      540
gagcatetet gtatgaettt egeteggeat ggaagtagag tttgagggaa atgagaacag
                                                                      600
aagccattgc cagacctctg gaaataaacg agactgaaaa agtgatgaga attgcaataa
                                                                      660
aagagatttt gacacaggtt cagaagacta aagacctgct caataatgtg gcctctgatg
                                                                      720
```

```
aagctaattt agaagccaaa atcgaaaaga gaaaattaga actggaaaga aatcggaagc
                                                                      780
gactagagac tetgeagagt gteaggeeat gttttatgga tgagtatgag aagaetgagg
                                                                      840
aagaattaca aaaagcagta tgacacttat ctggagaaat ttcaaaatct gacttatctg
                                                                      900
gaacaacagc ttgaagacca tcataggatg gagcaagaaa ggtttgagga agctaaaaac
                                                                      960
actototgoo tgatacagaa caagotoaag gaggaagaga agogootgot caagagtgga
                                                                     1020
agtaaccgat gactcggaca tagacatcca ggaggacgat gaatccggac agtgagttgg
                                                                     1080
aagaaaggcg gctgcccaaa gccaccagac agccatggag atgcctcatg caaggaagac
                                                                     1140
ctggcaaacg cattgtgggc acgatgccag gttggagact ccgatgacaa tgtaagtccc
                                                                     1200
ccgctcccct cagtggttct gtgcactctg ggtttggctg tccccataga tgggagtggc
                                                                     1260
tgagttgctg tcagcagcca gggagccgtc tatggtcagc ccggccgtgc ctcgatgcgt
                                                                     1320
ggcagggttt ggcctcatga ggctctggac tcttcgttgc tcgtggatgg ctcatctctt
                                                                     1380
ttcaagtgaa tgtgcttgct ctgctttttt ttgccttctc actgttcttt ccattctcgc
                                                                     1440
tttccaaaga tggaagcagc accagetete ttaggtaaat gcaagaette cagetecaag
                                                                     1500
aagcaggttg gttttctgtt ctgcctcatg tgtttgtggg tgtctgtcag ccctcccggg
                                                                     1560
gccagccagg ggcctctccc taggagtgat gcttcctctc tcctgggcaa aaaggccact
                                                                     1620
caaaagagat cctgtggtga cagcgggatc actgaaggcc cctgtgctaa agtggaggcg
                                                                     1680
caggcacgga gcctggaggc ggggaaagct caggccgggc catcctcagg ccctgggccg
                                                                     1740
ccacctagaa atgaaggagg acgccgaggg ccgggctcag gaccaacccc cctccctqtt
                                                                     1800
ctgtgctggg gacggaatgg tgaagcagca ctgtccccag accaggccct cgaggtgcca
                                                                     1860
ggcatgaggc tgagacataa gctgccttga gctttactga gtggataact ccctggagca
                                                                     1920
cttaagcaaa aggggattct aggggtcctc agtgaggtcc agtcatcagg gctctgccgc
                                                                     1980
ccattgctca agcctacgtt ctttgttgcg tccctggcag tgctgctcgg cccacacagc
                                                                     2040
aaagggcgac tcaacagaga ctgaccccag gctgcctcca tgtgccctga atttacaggg
                                                                     2100
cacagtetgt agagaageag agagageaac tggaaaataa ttttcctaac aagetegggt
                                                                     2160
gtggatggta tacagcgtct ctccgtcttg cccacccaag acagaagcag agggagtgtg
                                                                     2220
gcgtgggtgc tggcaatgct gaggcagcac cgcctgcctc ttctccaggg tttgccttct
                                                                     2280
ctctcctcag agcgaatgca ttagtcgcag ctgagcttta tgcctggtgg tcacttgttt
                                                                     2340
atttcaagga ggctgtgtcc atgccgccct ccaggcacag ggttccatgc tttacgtgtt
                                                                     2400
caggcatcca acacgtgtct gttgagtgcc tgccacatgc cagtgctgtc gtggattatq
                                                                     2460
gggaacgcag caggggcaga ggcaagcccc cgcttcatgg ctcacacccc agcaataatg
                                                                     2520
atggattgtc ggatcagggc tcatggtgtt aacaggagga ataacagctt caggggacag
                                                                     2580
ggagtgacag ggaacaagga gggggtggcg tettetgega ggteagtgaa ggeeeetgae
                                                                     2640
gtggtggtgt ttgagcaggg cctgagtgga gggagcgagc gcatgggttg gcggcacctg
                                                                     2700
ggcatgtgga atgcactcct cgcatcgagg agcagaggca gctggtgtga ttgtgggtga
                                                                     2760
gtgcgagagg cagcaggggc catgcagagc tttgcagggt gagatgaaga ctctgttttc
                                                                     2820
tctgagtgtg aggggaaggc cctgaagaat catgagccca gaagggtcaa gagctgatga
                                                                     2880
tecetgittg agagaageea gitaggagge geetgeacee gitggaggitea gaggitgaegg
                                                                     2940
tgcttggccg aaggtgtggc agcagaggtg ttgagaaatg gtcaggtcct gggtctctct
                                                                     3000
aagaaccatc aggttttgtg aattgattgg acataggctg ttagagaaag agaaaaatga
                                                                     3060
gggtgcctgg gcttggtcta atcagcagaa agcagagttt cattttctga gatggggccg
                                                                     3120
acttgacaaa ggggcttgga aggcagatcg aaagtttgat tttggacatt ctgaatgtga
                                                                     3180
cagccacatg ctagggttga gtagccaggt ggaatttaag tctggagttc aagggccacg
                                                                     3240
tctgggctag agattgaatt ttgggagcca cccttatttg gttggtatct aagccacaag
                                                                     3300
gatagatgtg actgcctagg gagagcaagt agaatgagaa gagaggcgac ccaaggtcct
                                                                     3360
gagctgcatc tgccctgcag aggtccggga ggaaggggca ggcagaggag gctgaggggc
                                                                     3420
gtcagcagtg aggaagggg acctggacta gagaaggggc cctgggggat ggagaagatg
                                                                     3480
ggttttaagg atgaaggggt gattccacag ctcaagcagg atgaggcctg agaatcgatc
                                                                     3540
ccagtccgtt gaatgtttcc ttcttgacag gagcagtgct ggggtcagta ggtgagagcc
                                                                     3600
cgggggaact gaagcagtcg tgaggggcac aggtgtggac agtgagttca acgactcgct
                                                                     3660
caggagettt gtgtgagggg agagagacag ggcagagcag ctggagagga aggtgggatt
                                                                     3720
acctttgggg tttttttca agaaggaaat tacagcatga gtgtgcaccg acaggaatga
                                                                     3780
tctagataga acgaccagcc atcctggttt acatgggacg caggaactgc cgttttaaag
                                                                     3840
ctgggctgag ttggtcaccc tggagccctg gatccgatga ggagagagag ggtgtgtctt
                                                                     3900
tcactttgct ccctttttt ctttttttc tttttttt gagatggagt cttgctttgg
                                                                     3960
agtgcagtgg tgcaatctcg gctcactgca cctctgcctc ccaggttcaa gcgattcttc
                                                                     4020
tgcctcagtc tccggagtag ctgggattca ctttgctcct tataccaatg tctatgttgc
                                                                     4080
tttccatcca caatctacaa aaagccaaaa caggcctccc ttccctctct ccaagcccct
                                                                     4140
```

```
gtccttcttg ccatctgtag ggggagtctc taggtccagt ggccctcagc gcagatgcag
                                                                    4200
agtgettett agaegetgeg ggaaageeag eecetgeage aceaeaceea gatgeaeetg
                                                                    4260
cagtttggag gattctggtt ggatgataaa ttccagctgg cagtacatag cctcagtccc
                                                                    4320
                                                                    4380
atctgtatgc cctcccacag cctgcttgcc actctgccag cctcttcctt cacacaggga
tgctgctata gaaagggagg cagagagtct taggacaaga tgtcaggaat gaggcaggat
                                                                    4440
cccccgttgc atctgccatt tttttcctat aggaggactc ggaggagagt gaaattgaca
                                                                    4500
tggaagatga tgatgacgag gatgacgatt tggaagacga gagcatttct ctctcaccaa
                                                                    4560
ccaagcccaa tcgaagggtc tggaaatctg aacccctgga tgagagtgac aatgacttct
                                                                    4620
gaccettttg ccaagggace etggeagatt aaaaceetca gaettgtagg taaatgggaa
                                                                    4680
cttagaaggt taggaaggta acccctgttt tgtttactaa gctggctgga ctccatgatc
                                                                    4740
actgaggcaa tacttatttc tgctttagcc ctcctatgtt tgcattccat gaagcttaaa
                                                                    4800
ataaggaatt gaagcaaaac ccctaagatt taattttttt cccaccttat ttatctttct
                                                                    4860
aaaaacttga ggaatgcatg tgttcttagt gattcacatc cacgggacaa aaactcaaga
                                                                    4920
agaaataaga gctgacgcca cacaagtctt ggctgctttt gttactatac attttctctg
                                                                    4980
agactccagc agagttgggg ctggaacttg gcactgggga ctcatgtttg gaatcgtagg
                                                                    5040
ggaacatctg gctgttaatc acttgcacag ttgagaacat ttcctataca tcggctttta
                                                                    5100
attotagete ttattteatt ttgtaatett attttettte gtetgeatgt teacaatace
                                                                    5160
aagcattaaa tgtattttaa taactaaact tttctgaaag aaggttagct aaagttaaat
                                                                    5220
gaaaacttgg tttctttgaa aatcaggcaa tagagacagg ctccagatga ggaatcctcc
                                                                    5280
attitetgic egaagetgae acteetetgg cagtecagtt cacettggat tacagecace
                                                                    5340
ttcatgtttc cacggttggt actaaatctg gaaactctgg tgacctgggc tgccctctca
                                                                    5400
gaaactccag actcccatgg caatgacagc cgggacactt ttcttccctc cagccagggt
                                                                    5460
ttctctaaag gagctttgtt ttgtctaaag tgtggcaaga catagtgcac aacacaggga
                                                                    5520
caaaggcagg tttcctgcag ctcgctacct aagtgtttct gtaggggaag gagccaatta
                                                                    5580
agaaaaagtg ttggtacaga ttcatgtttc tgatttaaaa aaacaacaac acaggattga
                                                                    5640
attaagtaga gtaatagcac tagaagaatt tttctgttgt gaaattagaa gtggagttgg
                                                                    5700
ttttttttt tttttttt aatatgaaaa gtacttagct gggagtggtg
                                                                    5760
gcaagegeee ttgggteeag etaeteagga ggeeaaggtg ggaggateae ttgageeeag
                                                                    5820
gagtt
                                                                    5825
```

```
<210> 6194
<211> 2648
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (257)...(1764)
<223> similar to gi299703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6194
ctactacata taaacatcaa aacaagctcc gggaagctac agaagatttg agtaaagtac
                                                                       60
tagatgttga gcctgataat gatttggcca agaaaacctt gtcagaggtt gaaagagatc
                                                                      120
tgaaaaattc tgaagctgca tctgagactc aaaccaaagg gaaaaggatg gttattcagg
                                                                      180
aaatagaaaa ctccgaagat gaagaaggaa aaagcggaag aaaacatgaa gatggcggtg
                                                                      240
gagataagaa gcccgcggag acggcgggcg gcggcgccac cgggcatccg ggcggcgggc
                                                                      300
agggcgcgga gaaccctgcc ggcctgaaga gccagggcca acgagctgtt ccgaagcggg
                                                                      360
cagttgcccg aggcggccgg caagtactcg gcggcaatcg cgctcctgga gccagcagga
                                                                      420
agtgaaattg cagatgatct aagtatctta tattcaaata gagcagcatg ttacctaaaa
                                                                      480
```

```
gaaggaaact gcagtggctg cattcaagat tgtaacaggg ctctggaact tcatccattc
                                                                      540
tctatgaaac ctcttctgag gcgggcgatg gcctatgaaa ctctagagca gtatgggaaa
                                                                      600
gettatgtgg attataaaac agtgttgcag atagactgtg gactccaget agcaaatgac
                                                                      660
agtgttaaca ggctatcaag aattttaatg gagctggatg gaccaaattg gcgggagaag
                                                                      720
ctgtcactta ttcctgctgt gcctgcttct gtgccactgc aagcttggca tccggcaaaa
                                                                      780
gagatgatet caaaacaaqe aqqaqaetec aqcaqecate qecaqeaqqq cateacaqat
                                                                      840
gaaaaaacat ttaaagccct taaggaagaa ggaaatcaat gtgtaaatga caaaaactat
                                                                      900
aaagacgccc tcagtaaata cagcgaatgc ttaaagatta acaataagga atgtgccata
                                                                      960
tatacaaaca gagctctctg ttacttgaag ctgtgccagt ttgaagaagc aaagcaggac
                                                                     1020
tgtgatcagg cacttcagct agctgatggg aacgtgaaag ccttctatag acgagctctg
                                                                     1080
gctcataaag gactcaagaa ttatcagaaa agcttaattg atctcaataa agttatccta
                                                                     1140
ctagatccaa gtattattga ggcaaagatg gaactggaag aggtaactag actccttaat
                                                                     1200
cttaaggata agacagcacc attcaacaaa gaaaaggaga gaaggaaaat tgagattcaa
                                                                     1260
gaggtgaatg aaggcaagga ggagcctgga agacctgcag gggaggtctc cacgggatgc
                                                                     1320
cttgcttctg agaagggagg caaaagcagc aggtcaccag aagaccctga gaaacttccg
                                                                     1380
atagccaagc ctaataatgc ctatgaattt ggtcagatta taaatgctct cagtaccagg
                                                                     1440
aaggataaag aagcctgtgc acatctttta gccatcactg caccaaaaga tttgccgatg
                                                                     1500
tttttaagta acaaacttga aggggataca ttccttctcc tcattcagtc tctgaaaaat
                                                                     1560
aatcttattg aaaaagatcc ctcattggtg tatcagcatc ttttatacct gagtaaagca
                                                                     1620
gaaaggttta agatgatgtt gacactaatt agcaagggcc aaaaggagct aattgaacag
                                                                     1680
ctgtttgagg acctttcaga cacaccaaac aaccatttta ctttagaaga tatacaggcc
                                                                     1740
ctaaaaaggc agtatgagct ttaaatcaag ataattgtta gatttcttcc atgcatgtat
                                                                     1800
gtgttccagg aatgttaatg agatggtatt gtaaaagagt tgcatggata aaacttggcc
                                                                     1860
tagaaaagtt tggtctgcac tataaaacat tttacttatt ttcctacata gaacatqtat
                                                                     1920
attctacaat ctgcttttta ttagttgtaa atattttctt atgtaccaga accaaataag
                                                                     1980
tatatttaga acttgttaaa aatacatttt aatttatgat atacatatta ttttaattac
                                                                     2040
ttgttaaaat tttgagttaa gttgcatttc tttgggctat gaaggagtcc tcttaagttt
                                                                     2100
gatagaaatg aatttettgt aacattettt tttaaaagtg gaagteatta acagtgatta
                                                                     2160
ttatatcact tatatcctgc taagatacac ataaatccca ttttgtacta gtacctgtgg
                                                                     2220
attacagtca gttaaaatga aatgcaacac tgaagtctat aacatgaaat gattattaaa
                                                                     2280
ttgtttatta atttagaget ataagaggaa ettattttt etaataegga ageattgeet
                                                                     2340
aataattaag aacaaaaatt gccaaaaatt tctaccactt tttactagat tttaaaaaagc
                                                                     2400
tactttcttt tatattgcct atataagcaa aaaaccaacc actgtattaa agcaaactaa
                                                                     2460
gcctgcattt atatctgaat tattacctcc atattttacc aaacatttga atgtccccct
                                                                     2520
tececetttt ttgttttetg ettttatgae tgtatttatt eetttaetgt aaaagaatat
                                                                     2580
gaagaactca tacatgttga aagctccttt gttgactggg tcaaagtgaa qgaatttcaa
                                                                     2640
tctccaaa
                                                                     2648
```

```
<210> 6195
<211> 8461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (243)...(7889)
<223> similar to gi5732618 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6195

```
60
gegacegete geceggacee tgaggetget gggeccacee teceggaace gteegaceet
                                                                      120
eggtggeete ggeetettet gecateteeg gteetaceet ggggeggagg gtggaaggea
                                                                      180
getteegteg aagaggaggg ggetgeggtg gecaeegegg eggageeega gttattttae
caagaaaatg gtttgcacga ctttgaacat atactatcca tgctgatggg acaggatcca
                                                                      240
                                                                      300
atatgaatat aaatgatgga ggaagacgac gctttgaaga taatgaacat acattacgga
                                                                      360
tatatcctgg ggctatttca gaagggacaa tctactgtcc gattcctgcc agaaaaaact
ccacagctgc tgaggtgatt gagtctctta taaacaaact tcatcttgac aaaacaaaat
                                                                      420
gttatgttct agcagaggta aaggaatttg gtggagaaga atggattctc aatccaacag
                                                                      480
attgtccagt tcagcgaatg atgctgtggc cccgaatggc tctggaaaat cgcttaagtg
                                                                      540
gagaggacta ccgcttcctt ctgagagaga aaaaccttga tggatcaatc cattatggta
                                                                      600
                                                                      660
gcctgcagtc atggctacgg gtaacagaag aacgtcgcag gatgatggaa cggggttttc
                                                                      720
ttccacagcc tcaacagaaa gactttgatg atttatgtag tttacctgat ttgaatgaga
aaactctctt agaaaaccta cgaaatcgct ttaagcatga aaaaatttat acctatgttg
                                                                      780
gcagtattct aatagttatt aacccattca agtttcttcc tatttataac cccaaatatg
                                                                      840
tcaaaatgta tgataaccac caactgggaa aacttgagcc ccacatttat gctgtggctg
                                                                      900
atgtagetta teatgeeatg etteagegea aaaagaatea gtgeategtg attteaggag
                                                                      960
                                                                     1020
agagtggttc tgggaagact caaagcacaa actttcttat tcaccacctt actgctctca
                                                                     1080
gtcagaaagg atttgccagt ggagtagaac agattattct tggagctgga ccagtacttg
aggeetttgg aaatgeaaag acageteata ataacaatte aagtegtttt gggaagttta
                                                                     1140
ttcaagtaaa ttaccaggaa acaggcactg tacttggtgc ctatgttgaa aaatatctac
                                                                     1200
tggagaagtc cagactcgtt tatcaggagc ataatgaacg gaactatcat gtattctatt
                                                                     1260
acctcctggc aggagcaagt gaagatgaga gatcagcatt ccatcttaag caaccagagg
                                                                     1320
aatatcatta totoaatcag ataacaaaga aaccootcag acagagotgg gatgattatt
                                                                     1380
gctatgactc tgagccggat tgcttcacgg tggaaggaga agatttgaga catgactttg
                                                                     1440
agegeetaca aettgeeatg gaaatggtag gatttettee caagacacga agacagattt
                                                                     1500
tetetettet eteageeata etacatttgg gtaatatetg ttacaaaaag aagacatace
                                                                     1560
gggatgactc cattgatatc tgtaatcctg aagttctgcc tattgtctca gaattattag
                                                                     1620
aggttaaaga agagatgcta tttgaagcat tagttacaag gaagacggtg acagtgggag
                                                                     1680
aaaagcttat tttgccatac aagttggcag aggctgtgac agtgaggaac tccatggcta
                                                                     1740
agtictictgta tagtgccctg tittgactgga tagtittiticg aattaatcat gcactictga
                                                                     1800
atagtaaaga tttagagcat aataccaaga cattgtctat tggtgttctt gatatttttg
                                                                     1860
ggtttgaaga ttatgaaaat aacagctttg aacagttctg tattaatttt gctaatgaac
                                                                     1920
gtttacagca ctactttaat cagcatatct ttaaattgga acaagaggaa tataqaactq
                                                                     1980
aaggtatcag ctggcacaac atagattaca ttgataatac ctgctgcata aatcttatta
                                                                     2040
gcaaaaaacc aacaggactg cttcatcttt tggatgaaga aagcaacttt ccacaggcta
                                                                     2100
caaatcaaac attgctagac aagtttaagc atcaacatga agataattct tacatcgaat
                                                                     2160
ttccagccgt gatggagcct gctttcatta taaaacatta tgctggaaaa gtaaaatatg
                                                                     2220
gggtaaagga tttccgggaa aaaaatacag atcatatgcg cccagacatt gtagctcttc
                                                                     2280
tgagaagcag caagaatgca tttatctctg ggatgattgg aattgatcct gtagctgttt
                                                                     2340
teegatggge aatteteega gettttttea gageeatggt tgettteagg gaagetggga
                                                                     2400
aaagaaacat tcacagaaaa actggacatg atgatacagc gccatgtgca attttgaaaa
                                                                     2460
gtatggatag ttttagcttt ctccaacacc cagtccacca gaggagctta gagattctgc
                                                                     2520
agagatgcaa ggaagagaag tacagtataa cccggaaaaa tcccagaaca cctctttctq
                                                                     2580
atctccaggg catgaatgct ctaaatgaaa aaaaccaaca tgatacattt gatattgcct
                                                                     2640
ggaatggcag aactgggatt cgccagagca gactatcaag tggcacctcc ttgcttgata
                                                                     2700
aagatggaat atttgctaat tcaactagca gcaaactcct ggagagagcc catggaattc
                                                                     2760
tcacgagaaa caaaaatttc aaatccaagc ctgcccttcc aaagcacttg ctagaagtaa
                                                                     2820
attetttaaa geacetgaca agaetgacae tacaagateg cattaceaag tetettette
                                                                     2880
atttacacaa gaagaaaaaa cctcccagca tcagtgccca gtttcaggca tcattaagca
                                                                     2940
agetaatgga aacaettggt caageagaae catattttgt aaaatgeatt egetetaatg
                                                                     3000
ctgaaaagct gcccttaagg ttcagtgatg tcttggtact taaacagctt cgatacaccg
                                                                     3060
ggatgetgga aacagttega attegecaat caggatacag etecaaatat tetttecagg
                                                                     3120
attttgtgag ccacttccat gtacttcttc cccgaaatat tattccatcc aaatttaaca
                                                                     3180
ttcaggattt cttcaggaaa ataaatctta atccagataa ttatcaagtt ggaaaaacca
                                                                     3240
tggtctttct aaaggagcag gaacgacagc acttacaaga tctgcttcac caagaggtgc
                                                                     3300
teegeagaat catattgttg cagegatggt teagggtett getgtgtagg cageatttee
                                                                     3360
tccatctgag acaagcatct gttattatcc agagattctg gaggaattac ctaaatcaga
                                                                     3420
```

```
agcaagtcag agatgcagct gtgcagaagg atgcttttgt tatggctagt gcagctgctc
                                                                    3480
                                                                    3540
ttctccaage ttcctggcgt getcaettag agaggcageg gtaettggag ttaegggetg
cagccatcgt tatccagcag aaatggagag attactatag gcgcaggcac atggctgcta
                                                                    3600
tttgcataca agcaagatgg aaagcctaca gggaaagtaa aaggtaccaa gaacaaagga
                                                                    3660
                                                                    3720
aaaaaattat ccttttgcaa tcaacatgta gaggattcag agcaagacaa agatttaaag
ctttaaaaga acaaaggcta agagaaacaa agccagaagt tggattggtg aatattaagg
                                                                    3780
gatatggatc tctggaaatt cagggttcag accettcaga atgggaggat tgttcttttg
                                                                    3840
                                                                    3900
acaacagaat aaaagccata gaggaatgta aatctgtaat agagagtaat cgaattagcc
gtgaaagttc agtggactgc ttgaaggagt caccaaacaa gcagcaggag agagcccaaa
                                                                    3960
                                                                    4020
gccagagtgg tgtggacttg caggaagatg tgcttgtaag agagagaccc aggtccttgg
                                                                    4080
aggateteca teagaaaaaa gtaggeeggg etaagagaga aagtaggaga atgagagaae
tagagcaagc tatatttagc ttagaattgc tgaaagttcg ttctcttggt ggtatttctc
                                                                    4140
cttcagagga tcgcagatgg tctacagaat tggtgcctga aggccttcag tctccacggg
                                                                    4200
                                                                    4260
gtacacctga tagtgagagc tctcaaggaa gcttggaact tctgagctat gaggaaagcc
aaaagagcaa actagagtct gtcatttcag atgaaggaga cttgcagttt ccatcaccta
                                                                    4320
agatatccag cagtccaaaa tttgattcac gggacaatgc cctcagtgcc tcaaatgaga
                                                                    4380
ctagcagtgc agagcatttg aaggatggaa ctatgaagga aatggtggtc tgcagttctg
                                                                    4440
agtictattac ctgtaaacca cagctgaaag actictticat ttcaaatagt ctacctactt
                                                                    4500
ttttttatat cccccaacaa gacccactga aaacaaattc ccaactagac acaagtatcc
                                                                    4560
aaagaaacaa actattggaa aatgaagaca cagcggggga agctcttact ttggatatca
                                                                    4620
acagggaaac tagaaggtat cactgctcag gaaaagatca gattgttcct tctttgaata
                                                                    4680
cagagtette taateetgtg ettaagaagt tagaaaaget aaacaetgag aaggaagaaa
                                                                    4740
ggcaaaaaca gttgcagcaa cagaatgaaa aagagatgat ggaacagatt cgccagcaaa
                                                                    4800
cagatatttt agagaaggag cgcaaagcct tcaagacaat tgaaaagcca agaattggag
                                                                    4860
4920
tecteagett aaatacetea aataagggag aacttaatgt aetggggtee etateattaa
                                                                    4980
aagatgcagc tettgeecaa aaagacagtt cetetgetea ettaceecea aaggacegae
                                                                    5040
ctgtcaccgt gttctttgaa agaaaaggaa gtccatgcca atctagtact gtcaaggaat
                                                                    5100
tatccaagac agacagaatg ggcacccagc tgaatgtagc ctgtaaactc tcaaataatc
                                                                    5160
gcatttcaaa aagagaacac tttaggccaa ctcagtctta cagccacaat tctgatgacc
                                                                    5220
tttccagaga gggaaatgct aggcccattt tcttcactcc aaaggataat atgagtattc
                                                                    5280
cccttgtcag caaagaagcc ttaaacagta aaaatcctca actccataaa gaagatgaac
                                                                    5340
cagcatggaa acctgtgaag ttagctgggc caggccaaag agagacatca cagcgatttt
                                                                    5400
cgtcagttga tgaacaagca aaacttcata agactatgtc tcaaggagag attaccaagt
                                                                    5460
tggcagtgag acagaaggct tcagattcag atataagacc tcagagagct aagatgagat
                                                                    5520
tctgggccaa agggaaacaa ggggagaaga agactaccag agtgaaacct actacccagt
                                                                    5580
cagaggtttc gccactcttt gcaggcacag atgtgattcc agctcatcag tttccagatg
                                                                    5640
aattagctgc atatcaccca acacctcctt tgagcccaga actgcccggc agttgccgga
                                                                    5700
aggaattcaa agagaacaaa gaaccttctc caaaggctaa gcgcaagcga agtgtgaaga
                                                                    5760
ttagcaacgt ggctttggat tctatgcatt ggcaaaatga ctctgtccag atcatagcaa
                                                                    5820
gtgtcagtga tttaaaaagc atggatgaat ttcttctgaa aaaggtgaat gacctagata
                                                                    5880
atgaagacag caagaaggat acactagtgg atgttgtatt taaaaaagcc ctgaaggaat
                                                                    5940
ttcggcagaa tatcttcagc ttttattcat ctgcattggc gatggatgat gggaaaagca
                                                                    6000
tacggtataa agacctctat gcactatttg aacagattct ggaaaagacg atgaggcttg
                                                                    6060
agcagcgtga ttcactgggt gaatctccag tgagagtttg ggtcaacact tttaaagtgt
                                                                    6120
ttttagatga atatatgaat gaattcaaga cttcagattg cacagccact ataggtgcca
                                                                    6180
aaaacagaaa gaaagaaaag aaggaaaaag gaaactgatt tggtggaaga acacaatggt
                                                                    6240
cacatettta aagecaceca atatageate ectacatact gtgaatactg ttettetttg
                                                                    6300
atatggataa tggaccgagc ctctgtttgc aaattatgca agtatgcttg ccataagaag
                                                                    6360
tgctgtctga aaaccacagc caagtgctct aaaaagtatg atccagagct gtcatctcga
                                                                    6420
caatttgggg ttgaactgtc ccgtttgacc agtgaagacc gaactgttcc tttagtagtg
                                                                    6480
gaaaagetea taaaetaeat tgaaatgeat ggaetgtata eagaaggtat ttategaaag
                                                                    6540
tetggttega etaataaaat caaggagett eggeagggte tagatacaga tgetgagagt
                                                                    6600
gtaaatetag atgaetataa catacaegte attgeaagtg tatteaaaca atggettega
                                                                    6660
gatttgccca atcctctcat gacctttgaa ctctatgagg aatttcttcg agctatgggc
                                                                    6720
cttcaggaga ggaaggagac aatccgtggt gtatactctg tgattgatca actctcccga
                                                                    6780
actcatctca atacactgga acgcctcatc tttcatctag tcaggattgc tctgcaggaa
                                                                    6840
```

```
gacactaatc gaatgtctgc taatgctttg gccattgtgt ttgcgccctg cattctccgc
                                                                  6900
tgccctgaca ccactgaccc actacaaagt gtacaggaca tcagtaagac taccacttgt
                                                                  6960
gtggaactga ttgttgtgga acaaatgaat aaatacaagg ctcgtctcaa agatatcagt
                                                                  7020
agettggaat ttgctgagaa taaggcaaag accaggttgt cactgattcg tagatcaatg
                                                                  7080
ggaaaggggc gtattcgtcg aggaaactat ccaggtccat cgtctcctgt tgtagttcgg
                                                                  7140
ttgccttctg tgtctgatgt ctcagaggag accttgacta gtgaggcagc catggagact
                                                                  7200
                                                                  7260
gacatcacag aacagcagca agcagctatg cagcaggagg agagagtact gactgagcag
attgagaacc tacagaagga gaaggaggag ctaacatttg agatgcttgt actggaaccc
                                                                  7320
cgtgcctctg atgatgaaac ccttgagtct gaggcctcca ttgggactgc tgatagctca
                                                                  7380
gagaatttga atatggagtc tgaatatgct atctctgaga aatcagaaag aagcttagcc
                                                                  7440
cttageteec tgaagacage tggcaagtet gaacetteca gcaagttgeg aaagcaactt
                                                                  7500
aaaaagcagc aagactottt agatgtogtg gactottogg totoctottt atgtotgtot
                                                                  7560
aacacggcat catctcatgg gaccagaaaa ctatttcaga tttattccaa atctccattc
                                                                  7620
taccgagctg cctcaggtaa tgaggccctg ggaatggaag gaccattggg ccagaccaaa
                                                                  7680
ttcctggaag acaagcctca gttcatcagc agaggaacct tcaacccgga aaagggcaaa
                                                                  7740
caaaaattaa agaatgtgaa aaactcacct cagaaaacca aagagacccc agaggggaca
                                                                  7800
gtcatgtctg gccgcagaaa aactgtggac ccagactgca cctccaacca acagctagca
                                                                  7860
ctctttggaa ataatgaatt tatggtctga accggcagat gtgtgtccct ccgtggctac
                                                                  7920
agagtggtaa acaaatctca cctttggggc tgcgtttcat cacctcgtcc acaatagtca
                                                                  7980
atcctaattg tggtcctgcc tcttttctaa gcatatggct aagactgtat gtgctgaatt
                                                                  8040
cetgggeete etgeagaage agaaageetg etggggatgg tgeeagetgt geettggetg
                                                                  8100
ttgtatttga attgagattt ttactataca aagccaccta gggcctgggg atttgggtca
                                                                  8160
gttgtagttg cctctcccc accctctttt cccttcccaa aggtgggtgt tgaactaggg
                                                                  8220
gggatattgc tgtcctgagg gaccctctca tttctgacat ttgaagaaaa cgtataaatc
                                                                  8280
tttcttaacc gtgaaagcaa aagcctttgg gtttattttg ggatagttag gagctagggt
                                                                  8340
8400
agatttctga aaaaacactc cactccatgt tatattctgg ggaaagcaaa aacaaaaaaa
                                                                  8460
                                                                  8461
```

```
<210> 6196
<211> 2085
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2086)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (767)...(1194)
<223> similar to gi5817230 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6196
tcgacccacg cgtaccaaaa ttctgttgta tgaatggcat ttgtatatta aaacactttt 60
ttaaaggaca gttgaaaagg gcaagaggaa accagggcag ttctagagga gtgctggtga 120
ctggatatca attttaagtg gcgttcacct agtcaacacg accgcgtgtg ttgcccctgc 180
cctgggctcc ccgccatgac atcttcactt tgcagcttgt gctgagactg acccaagtgc 240
```

```
agctageact gggacacaga teettgtett cagcacette caaggageca aettttatte
                                                                      300
cettteetet eteceetece cacetegett etteceaatt tagtaactta gatgetteea
                                                                      360
gcacatacgt aggtagctac cccagceggt ttggattaca ggcctgtgct ggaacatcat
                                                                      420
ctcagttggc caccttcctg gcaggctgta gacctgacat tttgagacaa gcctagagtc
                                                                      480
aggagcaggg actttgactc ttaggaagag cacacatgag ggcaaggctg ctggcagacg
                                                                      540
                                                                      600
tetecattgt cettatgttg tetgtgttgt atttttttt ttttattgae catgggtgat
tattttttta aaccatcgtt aatatactga agtgagctat agcacatatc atgtgctnta
                                                                      660
agtttgtgta tttttctcca tctccccttg gcttcctaga gtttggacat attccaggct
                                                                      720
aaatgetttt aeteaagaet aeagaaaggt ttgaagtagt gtgtgeatgg catgeaegta
                                                                      780
tgtaagtaat ctggggaaga agcaaagatc tgtttcattc ttagcctcag gcctcatgag
                                                                      840
ggtctccaca gggccggagc tcaggttaca ccactccttc gtccttacag gagatgtagg
                                                                      900
gagaagaatc tgcaggctgc ttgtgggact gttcaccaag ggggatacca gcagcaagag
                                                                      960
agtgcacccg tttagccctg gaccctgttt cttactgtgt gacttggcta gagttgggag
                                                                     1020
ttcccccaaa ataaacgtgt ccccatttta ccagaaccca aacctcaaca cagcgaagct
                                                                     1080
gtactgtctt tgtgtggcaa agatgttccc ttgtaggccc ctttcaggta accgtcttca
                                                                     1140
caatgtattt tcatcacagt ttaaggagca tcagccgctt ctcaagtggg tagggaaagc
                                                                     1200
aaaaaaacgt acgcaagagg acatggatcc aaaatgatga tgaagcatct cccatgggga
                                                                     1260
ggtgatggtg gggagatgat gggctaaaca ggcaactttt caaaaacaca gctatcatag
                                                                     1320
aaaagaaact tgcctcatgt aaactggatt gagaaattct cagtgattct gcaatggatt
                                                                     1380
tttttttaac gcagaagtaa tgtatactct agtattctgg tgtttttata tttatgtaat
                                                                     1440
aatttcttaa aaccattcag acagataact atttaatttt ttttaagaaa gttggaaagg
                                                                     1500
teteteetee caaggacagt ggetggaaga gttggggcac agecagttet gaatgttggt
                                                                     1560
ggagggtgta gtggcttttt ggctcagcat ccagaaacac caaaccaggc tggctaaaca
                                                                     1620
agtggccgcg tgtaaaaaca gacagctctg agtcaaatct gggcccttcc acaagggtcc
                                                                     1680
tetgaaccaa geeccaetee ettgetaggg gtgaaagcat tacagagaga tggagecate
                                                                     1740
tatccaagaa gccttcactc accttcactg ctgctgttgc aactcggctg ttctggactc
                                                                     1800
tgatgtgtgt ggagggatgg ggaatagaac attgactgtg ttgattacct tcactattcg
                                                                     1860
gccagcctga ccttttaata actttgtaaa aagcatgtat gtatttatag tgttttagat
                                                                     1920
ttttctaact tttatatctt aaaagcagag cacctgttta agcattgtac ccctattgtt
                                                                     1980
aaagatttgt gtoctotoat tocototott cotottgtaa gtgccottot aataaacttt
                                                                     2040
tcatggaaaa gctcctgtgc caggagctca gtctgaaaaa aaaaa
                                                                     2085
```

```
<210> 6197
<211> 1846
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1847)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (193)...(1409)
<223> similar to gi29648 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6197
ttcggcagag gggcgtggta gcgtagggtt gcgcggcccg gaaccgcaga gccggccaaa

```
120
gegeggegea cegtgegeeg gggeegtgeg egaagagaee tegegggege ggagegaaag
geoggegtga gtgagegegg agacagtgge egeeggegge ccaaccegte tatecetteg
                                                                      180
geogeegeeg geatgageea cateeagate eegeegggge teaeggaget getgeaggge
                                                                      240
                                                                      300
tacacggtgg aggtgctgcg acagcagccg cctgacctcg tcgaattcgc agtggagtac
tteaccegee tgegegagge cegegeecea geeteagtee tgeeegeege caccecaege
                                                                      360
cagagectgg gecacecece gecagaacee ggeeeggace gtgtegeega egecaaaggg
                                                                      420
gacagcgagt cggaggagga cgaggacttg gaagttccag ttcctagcag atttaataga
                                                                      480
cgagtatcag tctgtgctga gacctataac cctgatgagg aagaggaaga tacagatcca
                                                                      540
agggtgattc atcctaaaac tgatgaacag agatgcagac ttcaggaagc ttgcaaagat
                                                                      600
atteteettt teaaaaatet tgateaggaa eagetttete aagttetega tgeeatgttt
                                                                      660
gaaaggatag tcaaagctga tgagcatgtc attgaccaag gagatgatgg agacaacttt
                                                                      720
tatgtcatag aacggggaac ttatgacatt ttagtaacaa aagataatca aacccgctct
                                                                      780
gttggtcaat atgacaaccg tggcagtttt ggagaactag ctctgatgta caacaccccg
                                                                      840
agagetgeta ceattgttge taceteagaa ggeteeettt ggggaetgga eegggtgaet
                                                                      900
tttagaagaa tcatagtgaa aaataatgca aagaagagga agatgtttga atcatttatt
                                                                      960
gagtctgtgc ccctccttaa atcactagag gtgtcagaac gaatgaagat tgtggatgta
                                                                     1020
ataggagaga agatctataa gagaatggag aacgcataat cactcagggt gaaaaaggct
                                                                     1080
gatagetttt acateataga gtetggegaa gtgageatet tgattagaag caggaetaaa
                                                                     1140
tcaaacaagg atggtgggaa ccaggaggtc gagattgccc gctgccataa ggggcagtac
                                                                     1200
tttggagagc ttgccctggt caccaacaaa cccagagctg cctcagctta tgcagttgga
                                                                     1260
gatgtcaaat gcttagttat ggatgtacaa gcattcgaga ggcttctggg gccctgcatg
                                                                     1320
gacatcatga agaggaacat ctcacactat gaggaacagc tggtgaagat gtttggctcc
                                                                     1380
agogtggatc tgggcaacct cgggcagtag gtgtgccaca ccccagagcc ttcttagtgt
                                                                     1440
gacaccaaaa ccttctggtc agccacagaa cacatacaga aaacagacat gacagaactg
                                                                     1500
ttcctgccgt tgccgccact gctgccattg ctgtggttat gggcatttag aaaacttgaa
                                                                     1560
agteageact aaaggatggg cagaggttea acceacacet ceaetttget tetgaaggee
                                                                     1620
cattcattag accacttgta aagattactc caacccagtt tttatatctt tggttcaaaa
                                                                     1680
eggeatgtet etecaacaat ttaagtgeet gatacaaagt ecaaagtata aacatgetee
                                                                     1740
tttcctctct tggntgctac tcttgctttt gggaagttac cacaggggtc tggcaggaaa
                                                                     1800
cctgtttgta ttaactgttg gnacactctc taatggttct caaagg
                                                                     1846
```

```
<210> 6198
<211> 1804
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1606)...(484)
<223> similar to gi4886467 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ttgggaaggg acteceatgt etecettece atttatggge ttggggtetg gggtacgagg
                                                                      480
ctcacacagt gagtttgcag tgacacagct ccttgtagat ctgccgacga agtttgggca
                                                                      540
tgtcctgctg ggtgaagctg aatggctgag acagggccag atgcttgcag tactgcaaca
                                                                      600
caaaagcacc acagtcactg tcattattct gcctggccac attcattttg aagtaacctt
                                                                      660
tecageeetg gtggaaatee agteggtett tetttacege etetgeetgt agataettgg
                                                                      720
caatatgctt agggcagcgg cggtttaggg tacgctgcga gtcaaaatag gtgatggtgc
                                                                      780
gtcgcctcac atcaacagag atgagggacc aatgcacctc caggtggatg gggattagca
                                                                      840
gtagctcctt attgaagatg tccacgtttt tggtccacct tttcacccca tcataaccct
                                                                      900
tggtacggag tttatcaata gaagaaacta ttgaagaaat gcaccttttt cagggactgt
                                                                      960
gtccatgacc aggtctccat acatgttcat cacctggtca ttgagccagt tctgtccata
                                                                     1020
caaggteece aagteateea tggteageae gtgeegetta taageeaete ggaageeeet
                                                                     1080
caccatggca ttgcctggca tccgctggta agactggatc agctgcaaca ccaggccctt
                                                                     1140
cctggaaggg gtggaaaact cctgctggaa aatgtcctcc agcttctcta ctacctcatc
                                                                     1200
agtgctgagg ggtatgaggc tgccataccg tttgaaggaa ttcgtccaag atgctctgta
                                                                     1260
cgcaggtcac atgctcctct cgcaggggc tgtgctggcc ggcttttctc cccaggcctc
                                                                     1320
tetgeetett etgecatgee caaatetgag eeetgaaaaa geteetggge cacatggtee
                                                                     1380
ccgatgctgc acacattgct gatgaggatg ctggcatcag ggggtgccaa gctgcgctcc
                                                                     1440
ccttctggcc cagattgtcc cccaaaaccg ttgggcagag tacatgaaag gaggcccgag
                                                                     1500
tcagggtcca gaggagactt tggagtccac ctgagtccat cttcctccat ggggggccca
                                                                     1560
gagggcactg gtggagaccc tctcacccca tcctcagcca tgagagcacc tagcagaccc
                                                                     1620
agccggggtg gaggtggccc ccggggggag tcaaaacgac aacaggggga tggcacctgt
                                                                     1680
ggcgtcgcac ccccttgctg gggtgaaaga tggttcttgg ggtgtgcgag gccccgccgc
                                                                     1740
eggeeeeggt ggegeeeea aagetteeag tggaatgtea gegaggtget ttteeaegeg
                                                                     1800
tcgc
                                                                     1804
```

```
<210> 6199
<211> 1706
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (265)...(1389)
<223> similar to gi1840045 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6199
aggccctgtt gaagtacgga atgccggaag ggccgggctc aaagctccgc ctctggcgcg
                                                                       60
accgacgact ggagcgcagg gcaggggtag aggctcgtag atggaactgg tagtcagctg
                                                                      120
gagagcagca tggaggcgtc ctgggggagc ttcaacgctg agcggggctg gtatgtctct
                                                                      180
gtccagcagc ctgaagaagc ggaggccgaa gagttgagtc cgttgctaag caacgaactt
                                                                      240
cacagacage gatececagg tgtttcattt ggtttateag tgtttaattt gatgaatgee
                                                                      300
atcatgggaa gtggcatcct tggcttagct tatgttttgg ctaataccgg tgtctttgga
                                                                      360
tttagcttct tgctgctgac agttgctctc ctggcttctt actcagtcca tcttctgctt
                                                                      420
agtatgtgta ttcagacagc tgtaacatct tatgaagatc ttggactctt tgcatttgga
                                                                      480
ttacctggaa agttggtggt ggcaggcacc ataataattc agaatattgg agctatgtca
                                                                      540
tettatettt taattattaa aacagagett eetgetgeta ttgeagaatt tttgaetgga
                                                                      600
gactatagta gatattggta tcttgatgga caaacactac taataatcat atgtgttggc
                                                                      660
attgtgttcc ctcttgcact tcttcccaaa ataggctttc ttggctacac aagtagttta
                                                                      720
tcatttttct ttatgatgtt ctttgctctt gtggtaataa ttaaaaaatg gtccatccct
                                                                      780
```

```
tgtcctctga cattaaatta tgtagagaaa ggcttccaga tttcaaatgt tacagatgat
                                                                      840
tgtaagccaa agctctttca tttctccaaa gagagtgctt atgccttacc aaccatggct
                                                                      900
                                                                      960
ttttcatttc tctgccatac ctcaatattg cccatatact gtgaacttca aagtccttca
                                                                     1020
aagaaaagaa tgcagaatgt taccaataca gcaattgctt taagttttct catttatttt
                                                                     1080
atatctgcac tctttgggta cctcactttt tatgacaaag tggagtcaga attactaaaa
ggttatagta aatacttatc acatgatgtt gttgtcatga cctgtgaagt tatgccatac
                                                                     1140
                                                                     1200
tatttgctgt gcttttggac agtccctcta atccacttcc ctgccagaaa agctgtaaca
atgatgtttt tctccaattt tccattctca tggattcgcc attttttgat cactctagca
                                                                     1260
ctcaatatta tcatcgtttt acttgcaata tatgttcctg acattagaaa tgtatttggt
                                                                     1320
                                                                     1380
gtagttggtg ccagtacatc aacatgtttg atttttatat tcccaggact attttatctt
aaacttagca gagaggattt tctgtcatgg aaaaagcttg gggttggcgt gcagtggtgt
                                                                     1440
gateteaget cattgeaace tetgeeteee ggaeteaage aateeteeca ceteageete
                                                                     1500
cagagtagct gagactacag gaagagatac catggagatg tgcacccaga ggaaaggcca
                                                                     1560
cgcaaggaca cagcaagaag gcaactgttt acaagccaag ggaagaggcc tcaggagaac
                                                                     1620
caaacgtgtc cacaccttga tcttgcactt cccaacctcc agaactgtga gcaaataaat
                                                                     1680
gatgttgttt aatcccaaaa aaaaaa
                                                                     1706
```

```
<210> 6200
<211> 2060
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1456)...(1236)
<223> similar to gi220136 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6200 ttaatgtaaa attaacaaaa aatatttatg gccagggtgg tggcttatgc ctgtgattcc 60 agaactttcg gaggctgagg caggtggatc acttgaagtc aggagtttga gactagcctg 120 gccaacatga cgaaacccca tctctactaa taatacaaaa attagctggg tgtggtggca 180 tgtgcctgta atcccagcta cctgggaggc tgaggcagaa gaattgcttg aacccgggag 240 gtggaggttg cagtgagctg agatcgcacc acggcacact ccagcctggc cgacagagaa 300 agactccatc tcaaaaaaaa agaaaaggaa aaacatttgc acttcaattc tccttcaagt 360 taaaatgagt taaaatgcct ccttttggac aatcccctgg cttgaatgtg gctcttccct 420 ctctggtact ggtgcttagt acctcacage acctgacaag ttaagtgccc atggttgctg 480 aggcagatge etgeettgte etgeecacet geceaceaet teteectaaa etgaageece 540 acatttggag cagtcatctt tatcttggac acagcattga gcagatacct gttccacagt 600 caacctttta tcaagagaag gtaccaaacc caaaagtata acatctaatt cttacctgaa 660 ttttcagtgg ctcgatgtga ttcaggtaaa tatgtgcatc tcccaaagtg tgtataaagt 720 cacctggcta taaacccggg ggagaaagca gaacagtatg ttagtttcaa ttctttaaaa 780 catcatttaa aaacattaga atatgcagac accgcaaggc tttttttaaa aaaataattt 840 agtgtagctt ttccattttt ttgtagcaac agcatcttgt tatgttgccc aggctggtat 900 tgaactccag acctcaagca attgctcctg tctcagtctc ccaaagtgct gggattacag 960 gcatgagcca ccatacccaa cctcagcata gcttttgaga aaatccatag aagctgtatc 1020 acaaacaacc tgtatagatc tgttagtgcg tataccacag ggccagaaaa ccttccagaa 1080 gaggaaggtt tcaaagtaaa agctggttca tgtcttactt acacatatca aatttaaaag 1140 ctaatcagag actaaactct gcaatttgtt ttcccatatt aaagaactga agagctcagt 1200 gtggtaggct ggcaagtcac ccttcccgag acagcccacc ttcaggcccg tgatgtgcgc 1260

```
aatcatgtac gtgagcaggg cgtagctggc gatgttgaaa ggcacaccga ggcccatgtc
                                                                     1320
tcccgatctc tggtacagct ggcaggacag ctcactgttc accacataga actggcagag
                                                                     1380
ggcatggcat ggaggcagcg ccatcagagg aagatctgag gaaccagcag aggaagataa
                                                                     1440
ggagggatgg tggtttgaaa gaccacagct aaaggcaaag taaaacagga gagaaacaga
                                                                     1500
agccaactca tatggtggag accaggagag agagccactg ggctgcagtg atgtccataa
                                                                     1560
cagcetetge agegatggea eggagetgag ggagaetate categgtgea aggtttetge
                                                                     1620
aggtgtccat ttacggctga agcaatgctc ttccatcaga gctgaaggga tctgggctac
                                                                     1680
ctcgtggcac cagattacaa atacagcagg aataattctg tttgccacag gaaactggtg
                                                                     1740
cttctggtac accetectat attaaaagte tetattacat ggeecaggge acagtggete
                                                                     1800
atgcctgaaa tcccaacact ggggacgcca ggggtggggc agattcactt gagggccaac
                                                                     1860
ttgagttcga gactagcctg gccaacatag tgaaaccccg tctctgctaa aaatacaaaa
                                                                     1920
attegegege etgtggteee agetetgggg etgaggaatg ggaacteget tggaeetggg
                                                                     1980
agatggaggt tgccgtgagc ggagatcgcg ccactgcact ccaagcctgg gcaacacgcg
                                                                     2040
ctgagactgt gtctcaaaaa
                                                                     2060
```

```
<210> 6201
<211> 1744
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1478)...(204)
<223> similar to gi4929613 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6201
gacacgggga tcgtgtcatg actccatttt gtaaaagaaa aggggaatca aaggaaactt
                                                                    60
caaattttaa aaaaagaggg aataatcatc tcagtgtact taccatgttg cttagatttc
                                                                   120
180
cttctttcct tatcttttc ttttctctta ccaaatgctg ttgagctttt gtcttccaat
                                                                   240
ttcacttttt tttctgtttt cgatattcct gctgctgctg gagctcctct tccatcagct
                                                                   300
attgctttgg aagaaggatt tggaagcatc tgtgtatcct ctttttctgc cctgggacat
                                                                   360
tcattacggt aagaggaatc tgaggctacc ggtgctgtaa cttctgaacc acgacttaag
                                                                   420
tcaagaggga gacagggtcc cagcttctca agtggcaaat gtgcaacatc aggcacctct
                                                                   480
ggtactgaag attcttgctg attttgagaa ctgatggaga atactttccc atcagtggct
                                                                   540
ggagaggag aagaaacctt ttctacagaa tcatcaggca tgggtaaggt ggctaaacgc
                                                                   600
tgagatette tteteegete actatgettg aaaggtetag ggggatteae aggetgtgga
                                                                   660
ggactagttt tatttatcac tgaagaagaa agctgagata caagcgtcaa atcctcgact
                                                                   720
tgtattaatt ctggggaaag tggtgattta gggggtttta tacacccaga agaatctcca
                                                                   780
gattcatgtt tgcatttctt gctgcgagcc ttccctgaag acaaagttga ggataacagt
                                                                   840
gcaggtttct gagtgttggc agaactgcta atgtcagctt cattttttt ctgactttga
                                                                   900
ggtttaggtg aaatcgcctg ctccagcatt ggagctgttt cattgtagtc ttccttttt
                                                                   960
tcagcaccat caaccccaac agctttggat gccaacaaac cagtaatctt gttaagtcga
                                                                  1020
gctctctttg cctgaaacga gttgccttga ttatttttcc tcttgtttga taatgtgctc
                                                                  1080
tctggctgtg gaaagaccat ctttggaacg ttctctacat gaagtcctac aaatgtttca
                                                                  1140
ctagatgtag gcagatcttc cttccttcct ctacgtctgg tgtggctaat aacaagttga
                                                                  1200
aagtttcctc catctttgaa ggtactttaa accactttct ctcatcttta tccttatctt
                                                                  1260
tattgctgtt agcgctggtt cgaggtttac tccctgtttt gttcttggct gcagctgcag
                                                                  1320
cagctgcttt gactaaagct atccaatcct cacttcccat agactggtta cacgatccag
                                                                  1380
```

```
ctgggtcgat aggacaacac cagcttagtg gatgctggga tttcacctgg aacagaaact 1440 gccccttagc atcctcgggc atggctttaa tgtgcattct ttttaaacaa cgaattactc 1500 catcataaaa ctgaactgta aatgttcctt ctttgttaat tgcttcaatc ttggcagggt 1560 aatagcgaca gtctgtccaa cgagccagaa cttcttctcc agctttaaaa tcaaagaaat 1620 cttcctcatc ttttagccct tctttctta gtgctggtct ctcaaggggt cgcaatctat tgcttaccca gtaaatccac tcatcataac gatgactcca gcgctcaaaa tggaccaaca 1740 tctt
```

```
<210> 6202
<211> 7872
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(7873)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7489)...(2075)
<223> similar to gi4151330 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6202 tgtggacaga gtaaaaaagt ttattaacat tctgagaagg acagaaattt tcaagaatca 60 tcattagtgt taacaaagct tgatgaaaaa attcggatgc aaggagggtc aatgagttat 120 tgggtggtct ttcaaataag caaacctcaa gcaataatac caaagtgttt taaaagagcg 180 tttaaaatga attttattct ttgaatttta caaggtagtc tttagaggct tcaaacaaga 240 actctgttgc aaaactctaa taaatagctt gccccaaagt ccccaaacaa aatgtaaaac 300 aaaatgagaa ctaaactcag aaggataagc aagacttcag aatgcttggg atgttaggca 360 atatttctca tttacaaaga ggatatcagg gcaatgtaca atctccttca tacaagtcaa 420 agagaggaaa gagacaggac aattggaaat cttcacaaag gcactccgga aatcttccta 480 tttccatgat agaaatgtca ccagaaaaaa aaaattccat gggaggaatt cacaatcaag 540 gattggaaac tgtaggcata aaaattctgg gtagtgaatg tagcagggag aagagggaa 600 aatccatcct gtttctttca gggatggaga gaggaaggaa ttgagattac ttgggtgaag 660 ggaacttcca atcagatgcc gctagagtgc tgaatgttcc cttagaccag agttgccact 720 gaaagggcag aggggtcggt ttagtgacag ttatgaaggc aacaaacaaa ggggtctcct 780 caggicagic aaaactggcc agccccatgi ctctgtgctc tacagcagcc ttggaagagi 840 gacccagggg cccaaagcag cctgcatcac aagacagcaa aaatagcaca tcaataattt 900 ctgcagcgga atcctttgga tggccatgaa aggatgcaga aaatgccgtg ctgaaatttc 960 acactgggac atgcaggttt caaaagccca ttctagtatc acagtcatta ttcctaacaa 1020 gcaatgatta aaattcacaa ttaaacattc actgttagct tctcctagtt acaaatactg 1080 gtgaagtett getetggaga gaaagattaa tttagagata tggteatttt cageaageta 1140 aaaaaaaccag ttgtgccaca tttttatctt taaaaatctt taaaacgtat acttttgacc 1200 aaaatgcatt caaaatgcag acagataagg ttttagtttg ggggaattct gaaatcaatt 1260 aatgtttgga gccaggaagc tgtaagagag attgattcca atttagtggg gctcaattaa 1320 gccaaacaaa aaagagtctt gacagcacaa gtgggaacca tcttcctggg gaaagggaga 1380 agcaggaaat gacctcacaa tgcaggactg agaaggggtg tggcctgcag gcactgtcag 1440 agetgetetg gtttacagae ttgetgttaa atatttaact ceggteetge tgatetetgg 1500

```
aggacaggta cagacagcac tagctcatgc acgagtcatt caagggaggt aggcattttc
                                                                    1560
tcaaagcaac tccctctcca ggcattttag ggaagaaggt aaggaaatat ccctctctac
                                                                    1620
tccccaaaca agttataaaa acattctttt tctaggaata atgatatttg ttagaataac
                                                                    1680
aagggaaagc ttgggttacc tgaagttgat aagaaagctg atgggaatag aggcggatgg
                                                                    1740
gccagggggc gccctggtcc aaggcccagt ttcttcttaa atacataaca gataaagata
                                                                    1800
ttgtgcaaaa aaataaagac attcacattt tagcagttaa acttttttt tactgtttaa
                                                                    1860
aatttttatt tactttttt gtttttttt tctacaaaag gcaggtgatg attgttgatc
                                                                    1920
tgcaactatt gtgttgtgca ctccccgaaa gggggcagag taggaagcca gggaaggtgc
                                                                    1980
tetgaggatg etttetatgg agggaataag ggettgeagg acaeteaetg gagggagtgt
                                                                    2040
ctgggccctt ctcctgtcct cctcagcctt ccctagctca tgtctatggt gttgaaaacc
                                                                    2100
cattetgtga acttetteag ettgteegag gegttetggg acteeteetg tageeteagg
                                                                    2160
ttgtcctctc gcaggtgctg cacctccgcc tgaaggtgag ctttgtcttc tttttccttc
                                                                    2220
ttcaaatctt cccgaagcat cttcagcata ccttccagct ggtccacttt agaagccaga
                                                                    2280
gtgggagagg agtctttact gctgctgtaa ggcttcatct gggccagagc ctggtcctcc
                                                                    2340
agctgatcac tgttggatgc agcactcaag gggcgatggt tttcatcact agcagcaaaa
                                                                    2400
aatgaggete tetggacete ataggetttg geageateta eeaggttgga eeaateeaag
                                                                    2460
tetgcagcag tgtcaggcag gggcatcagg ccagggtcgg gcataggctg cctgcgggtc
                                                                    2520
tectggatgt cagtgaggga getgteegag getgagaact etecatgeag egattteatt
                                                                    2580
cctaaggtgt aagaaggcct cctcaacggg agcgacttgg ggagagaagg gtacgtgcta
                                                                    2640
                                                                    2700
ctgaagagga cgtcgttggg cagggcttgg tccagaagtg acgccctgga ggtgaaaaag
tgctccctct ggctattgta aatgctctcg tccgacagtg ttctgtgcaa ggcccgccgt
                                                                    2760
2820
ttctgtgatt caggagttgg gctttcaaga tcaattagtt tctttagatc ttcttcaatg
                                                                    2880
gtggacttgg aggttggctt aggagatgcc cggaggtctc tggttgaggc acgcagcctg
                                                                    2940
gtgtgggcta tttcattgcc atcgctctga tgacgctttc tcgtgtccat aaatcccacg
                                                                    3000
gagtttatgg ttccttcggg ttttttccat ccaatcaggt acttgctagt agcgccctgg
                                                                    3060
cgagggtaaa aactcctagg accagaggag gaggaggaag aggaggagaa ggatggtgcg
                                                                    3120
agctgtgagg gggcagctgg atgaagctct tctttaggtg aactccgggc actggtgaaa
                                                                    3180
accactgggc tggcagagtg tcgggagctc atggtacttg tgtgggaagc agcatcgttt
                                                                    3240
atactgaagg tgctgttctc ccttgtcaga ggggtcgagc cggcttggct cttgctgtqt
                                                                    3300
atgtctaagc tcagggaaga ctctgttttc cggtccaggc cgtggctctc tgtctccaaa
                                                                    3360
gtccgatctg ccatggagat tacttcactg gagctgtgcc ataggggtgc cactttctcc
                                                                    3420
ttgcctggcc ctgagcgagg tgacgatgtg gcagccccca gcgaggctgt gctgccgtgg
                                                                    3480
ctggggccat aagaggtggt gtcaatgcca ctgtcagcag aggtgccttg cagatagtta
                                                                    3540
tagetgttga gtteggatte tgtgeggtee ceategtace aetteteate aetatgggea
                                                                    3600
cttgacgcat tgctggagag agtattgcta ctggagtggc tcgagtagtg gctatcagaa
                                                                    3660
tgcccttgtt tgtttggaga caaatgaacc actggatect gccgcattaa tctcccactg
                                                                    3720
gggctctctc ggaaagctgg cagtaccttt gatactgctg ggagatggca tgttggctct
                                                                    3780
gtatattcat gctgctcgag gacaaaagaa ttgaaatcct gaggtcctct ataactgtaa
                                                                    3840
gccatctggt cagcaatgct atcctcactt ctttgccagc taggcgtgga ttttccgctg
                                                                    3900
ccaccaatat ctgactgggt gttctgcctg tcagtggagg ctggggatct acggctcact
                                                                    3960
ccaaaccctt cgggcatgga cttctgcctg taagtgcccc ccacagaacc agtatcactg
                                                                    4020
gatgaagaca agttgctagg agagttccga cactgggatc ttgctaaagc catggatgag
                                                                    4080
acceptcacat agatetccea accaegagac agceeectct ctaetegeee ecceptcacte
                                                                    4140
gagatgette gagggatgtt ggeggetett tetggaggag geatetteee ateteettt
                                                                    4200
ccagcattca gccgcgaggt catgggactc tgcacctggg acgggacttg aggtgaatga
                                                                    4260
ggccccttgc tggcgttcct ctgccacttg ttattatttc ggaagggaaa cttgaattcg
                                                                    4320
tatgaaacac cttcattcat tttgtactcc atcactggca tgcggtaggt ttcagagcaa
                                                                    4380
ctcctccgcg gggtgcagtc atcatgcggg ggaatgatga caaccttcac cgtgacagat
                                                                    4440
gttctcagga ggtcgatcat ctgctcatgg ctcagcagtg gctaccgcca ccttgcagat
                                                                    4500
ctccaccagg cgactgccct gcctcagccc tgcctgccag gcataaccgt agggctccac
                                                                    4560
atcogccaca atgccctcat agttgacatg gaagccaagc tgtcctagcc catttcttcq
                                                                    4620
cagagicate tecacegati cacageetti tgaaacaaac tgcaacetti tgacaatete
                                                                    4680
tttgatetee teaatgttaa taaaactaee caetgaaaca catteteete gtteatagaa
                                                                    4740
gattttgagg ctggtgtcag ttgaagtcca ccctatcaca tctctacagg aacaattgaa
                                                                    4800
gaccacgctc tttgtttcct gttcaatgag cacaatgaac tcattggaga tccctaaaag
                                                                    4860
gcagtctagt tccatggcct tgttgtagtc ttcagcccgg actgcccata caatggcccc
                                                                    4920
```

catgctgctg	agctcggctc	ctggatatgg	cttagacttt	tccttcttct	tggaagccag	4980
agagatgaac	ggaaacttgc	cagaagggtc	gataggggtg	ttggtgacat	tcttttctgc	5040
cagatctttc	aggtattcct	ggcgggtccg	agttgccatg	gcccgaaact	tctccgattt	5100
atgagcagca	ttttctgcat	taatcacttt	cgccaaaagg	aagtccctga	acacatttga	5160
		taggaatggg				5220
ggtaacagcc	acactataac	agacactgtc	agagcacgga	ttgtgcaccc	tgacgatgac	5280
gaaaacgtgc	tggaagtggg	atcggatgtt	ttttgggctg	aatggctgtg	ctccaggctc	5340
		tatcatttcc				5400
		gcatggtaga				5460
		ttccagtgga				5520
		gaactcgctc				5580
tgggccagct	gactcattgt	tgtacatctc	ttcttcagtg	ctctgtccag	ctttgcagta	5640
		ggtagttcag				5700
tgtgaccttg	ggtgtgttga	aggccaaccg	caggcactgg	acattgagct	caggaaccac	5760
		gaggcaggcc				5820
aatggcgtcc	tccaggaccg	aacctctcag	tgtcatgagc	tcactagttc	taaaaattat	5880
		cattttcttt				5940
		tctcatcagc				6000
gaaaaatttt	ctataatagt	atgcacccag	atctacgtgt	tccacgatgt	atcttttcac	6060
		agttctcctt				6120
tgtgcaatgg	gaactaaggg	tagactcaaa	ggaggcactt	tcacatccac	taaaggagcc	6180
		tgattttcct				6240
atatggacag	ctcattacaa	gctcattgct	tttatcatct	ccctggtcca	tgctgaggct	6300
		ctgtgctgcc				6360
		atgccacggc				6420
		tgttcataat				6480
		actttggaca				6540
		acttcccaag				6600
		tttcagattt				6660
		ctctctgtga				6720
		cagtaatgag				6780
		tgtagccctt				6840
		atgtgctacc				6900
		catcaaagct				6960
		ttctgcgaag				7020
		ccatgttctc				7080
		ctgagtcatt				7140
cacaggactg	cttttggagg	acaggctatc	aaggcaactt	gaggtttcta	tttcctggct	7200
tgaacggcta	gattctttta	tgttttcctt	tcttgggggc	caatctgcaa	tccttgccct	7260
tacccccatt	tttgggactc	cgggggttga	ggttatatgg	tgagaacctt	cacttcgggg	7320
		ctgatgatcc				7380
catgtagaaa	tcatcagtgt	ggactttggg	ggtgccgtct	gtgccaacaa	cagaggccct	7440
gtcagtggca	agaggccttt	ctgtctgtga	ccgtttcaag	ctggtcatga	tgtaaaagca	7500
agtagactta	aatccctgca	gcaaggacca	tcatatctgt	gttttaaatg	tgcacttccc	7560
ttttggagaa	tggcttccag	aaaatacaac	agtggcatga	gatcttaatc	tttttcattt	7620
		atttgtaaag				7680
		tttcacttta				7740
tggaacttgt	actactgaga	ttctgtggtt	gccataatcc	catgctttct	cgagaccagg	7800
		cattcnccac	cacctcttcc	caagctatcg	aaagtttagg	7860
gtactcttaa	aa					7872

<210> 6203 <211> 4071

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(2099)
<223> similar to gi2072501 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6203 atacgcgaag cctggacgga gtgggtggga gaacgacacg aatggataga taatcatgta 60 cctacaagca ctctagtcca aaactcatgc tgctcgtatg tagttaatgg agacaacaca 120 cetteatete egteteaggt tgetgeeaga eccaaaaata caccagetee aaaaccaete 180 gcatctgagc ctgccgatga cactgttaat ggagaatcat cctcatttgc accaactgat 240 aatgcgtctg tcacgggtac tccagtagtg tctgaagaaa atgccttgtc tccaaattgc 300 actagtacta ctgttgaaga tcctccagtt caagaaatac tgacttcctc agaaaacaat 360 gaatgtattc cttctaccag tgcagaattg gaatctgaaq ctaqaaqtat attaqaqcct 420 gacaceteta attetagaag tagttetget tttgaageag ecaaateaag acagecagat 480 gggtgtatgg atcctgtacg gcagcagtct gggaatgcca acacagaaac cttgccatca 540 gggtgggaac aaagaaaaga teeteatggt agaacetatt atgtggatea taataetega 600 actaccacat gggagagacc acaaccttta cctccaggtt gggaaagaag agttgatgat 660 cgtagaagag tttattatgt ggatcataac accagaacaa caacgtggca gcggcctacc 720 atggaatctg teegaaattt tgaacagtgg caateteage ggaaccaatt geagggaget 780 atgcaacagt ttaaccaacg atacctctat tcggcttcaa tgttagctgc agaaaatgac 840 ccttatggac ctttgccacc aggctgggaa aaaagagtgg attcaacaga cagggtttac 900 tttgtgaatc ataacacaaa aacaacccag tgggaagatc caagaactca aggcttacag 960 aatgaagaac ccctgccaga aggctgggaa attagatata ctcgtgaagg tgtaaggtac 1020 tttgttgatc ataacacaag aacaacaaca ttcaaagatc ctcgcaatgg gaagtcatct 1080 gtaactaaag gtggtccaca aattgcttat gaacgcgggt ttaggtggaa gcttgctcac 1140 ttacggtatt tgtgccagtc taatgcacta cctagtcatg ttaaagatca atgtgtcccg 1200 gcagacattg tttgaagatt ccttccaaca gattatggca ttaaaaccct atgacttgag 1260 gaggcgctta tatgtaatat ttagaggaga agaaggactt gattatggtg gcctagcgag 1320 agaatggttt ttcttgcttt cacatgaagt tttgaaccca atgtattqct tatttqaqta 1380 tgcgggcaag aacaactatt gtctgcagat aaatccagca tcaaccatta atccagacca 1440 tettteatae ttetgtttea ttggtegttt tattgeeatg geactattte atggaaagtt 1500 tatcgatact ggtttctctt taccattcta caagcgtatg ttaagtaaaa aacttactat 1560 taaggatttg gaatctattg atactgaatt ttataactcc cttatctgga taagagataa 1620 caacattgaa gaatgtggct tagaaatgta cttttctgtt gacatggaga ttttgggaaa 1680 agttacttca catgacctga agttgggagg ttccaatatt ctggtgactg aggagaacaa 1740 agatgaatat attggtttaa tgacagaatg gcgtttttct cgaggagtac aagaacagac 1800 caaagettte ettgatggtt ttaatgaagt tgtteetett eagtggetae agtaettega 1860 tgaaaaagaa ttagaggtta tgttgtgtgg catgcaggag gttgacttgg cagattggca 1920 gagaaatact gtttatcgac attatacaag aaacagcaag caaatcattt ggttttggca 1980 gtttgtgaaa gagacagaca atgaagtaag aatgcgacta ttgcagttcg tcactggaac 2040 ctgccgttta cctctaggag gatttgctga gctcatqqqa aqtaatqqqc ctcaaaaqtt 2100 ttgcattgaa aaagttggca aagacacttg gttaccaaga agccatacat gttttaatcg 2160 cttggatcta ccaccatata agagttatga acaactaaag gaaaaacttc tttttgcaat 2220 agaagagaca gagggatttg gacaagaatg aatgtggctt cttattttqq aqqaqctctt 2280 gcatttaaat accccagcca agaaaaattg cacagatagt gtatataagc tgttcattct 2340 gtacagtgaa ttttccgaac ctctcaaagt atgttttccg ttcttccaca gaaatatgca 2400 aaacagttca teetttteta etttatttat tgtteeettg aaatgaetga eeaggaaaaa 2460 gatcatcctt aaattttgaa gcaagtgaga gactttatta aaaatacata tatatctata 2520 taaacatata tgatagtggc tctagtttta tagagctcca agtgtattaa acatgacagc 2580 cattcattca taaagatctg gatttgcttt accttgttaa tattatctag gggaaaaagt 2640

```
gcaaattqct ccatgttctt ctctccctta tgtaacatct cctgagggtg tttagttqca
                                                                     2700
tggctgttca gaaaggtatt aagggcttag gccaaatctt actttgagta tgttaaaaaa
                                                                     2760
aaaaaaatgc tgctgggctt ttctgaaaac aggtgcttga acttgtcagt ttgttttaaa
                                                                     2820
taaatacaat agtggaaaat ttttctctgt tacatcagta atattgttaa agtaatggat
                                                                     2880
agaaccataa cttacccatg aaagtcatat actaaatcca atactattta gtttattatc
                                                                     2940
gaaattggaa ggattcattg agcagcatag aagtttgttt acatgttact ttgagatgct
                                                                     3000
aggtatttgt ggaattaaaa agaatcaagc ttcttttgta ctttqtttt aaatctqtqa
                                                                     3060
tgcttttcaa atttaattca taataaattg atgcaatttc atacttagga acatacaaaa
                                                                     3120
ggtaatgtaa actotgocao ttttttgtgt toaaaatttt ggtttttatg gaagooogga
                                                                     3180
tggattgaag agttacataa gcatttgaat gctctaatat aaggctaatg attttctgtt
                                                                     3240
agtgtttgaa tatcttcatt cctctcaaat tcataacagt tctatttaac tgaattaaat
                                                                     3300
aaccatatga aaaatctttt gggtctcccc ctttttacac gagataatta tttttgtcat
                                                                     3360
aacacttttt aattgttttt catcataggg gcctttgctg aactacaaaa atgtgtaaca
                                                                     3420
aattaaaatc tgatgtgaat gatattaatg ctacttttag caaactgggc ttcctaatac
                                                                     3480
aaaattttaa atttccattt gtatcatgct tttaatatgc actgtaaatt tcattaactt
                                                                     3540
aaacattttt taatagccat ggaactgact tcttaaaatc tgttgcctat aaatatttca
                                                                     3600
ctgctaagta catacagaaa aacagtaatt attgttttgc caaaatttta tttttctaca
                                                                     3660
tattgagagt gtgttctcca ttttattcag aattcatagt aaagacgaaa gaaaggcaga
                                                                     3720
gatetgettg gttgaataga eteettttee aaateettat tatgaacaet etgqtaattt
                                                                     3780
tcaagcctaa agaattaaaa aaaaaattct aatgtatgtg acaggttatg tgatagaggg
                                                                     3840
aaactggcct tcaaaaacgg actgcgtata ccataaaaga gttaagtatt agaattacaa
                                                                     3900
atggtaccac tgctgtataa attttgccat gacagaagtt attgaatatc attcattqta
                                                                     3960
ggtatgattt agcagatttg actgaagaag ggcagctttc cagttcgttt tcagggtgct
                                                                     4020
ggtcttcctc aagtaagaaa ttacgatgca ctaggtgagg ctacacagaa c
                                                                     4071
```

```
<210> 6204
<211> 8435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(8436)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2859)...(6129)
<223> similar to gi37334 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6204
ctaaaaatac cattaagtaa tagtattagc ttttgtattc tgagattcaa cagcagcagt
                                                                       60
cactteecte cacteetatg tgtateecag gaccaecetg ggeggggagg getgaggtea
                                                                      120
gggaggtctg aagctggtcc tgggctccgg gggtgacagt gatgaggaac tgggtgcaca
                                                                      180
catgagtggg gcagccgggc ctggccagag aagcaacaca cacgtgcaca gacatgttta
                                                                      240
tecacataca catgtgcacg catgtgcaca aacacattgc aggcaggcat gttgacgcct
                                                                      300
caggcagcgg aggaccctga ctctgggccc tgctgacccg ggcaaggccc attgtgatgc
                                                                      360
gtgccatgac ctcagaatgt cactggtgct tagcacctat ccgctctcca gactgcgtct
                                                                      420
gtgttctacg gcagttacac acacgcagtg gtattcacaa gcggttttgt ggactcaaag
                                                                      480
```

```
gttttctccc tgagaggcat aacccaggcc agctgattca tcagaatcag gtgagtgtga
                                                                      540
cetgetetet teeeteeagg etgaettggg gaeagtgget atggtatggg eggtgttgge
                                                                      600
ctctgggcag ctacagagga gggtcatccc tgagcactca ccgggcgccc gttctacact
                                                                      660
gcccatgtag acgattttct ctttcgtctt catggtggct tcgtagagtg ggtgctgttc
                                                                      720
ccaaatgtac ccattcgaca ggtgagccgt ctggggtcag agaggcagta actggcctgg
                                                                      780
gaatecagae aagaeeetgg gttttgetet cageeetget gtgtgeeatg etagaettea
                                                                      840
ggcctcaacc ctgagacctc cctgctctag atcccaaatc tgcccagatt tccgatccaa
                                                                      900
tgggcagagc ctggccctgg cagagacact gggatggatc cactgtgggt ggggaggagg
                                                                      960
gaagggteet cagaacacac etggggeeta agetgggtet tgatggteac tgtgggacee
                                                                     1020
actggacaca cacagtccct tgtctgggag tggcatgggg agccttctgc ccttgggcag
                                                                     1080
ttgtggaaag tgaaggagcc ctggagagct ggctgagggg agactatett ceettgtgtt
                                                                     1140
caaaggggtc caggcactgg ggctctcccc aagtatttct tattctgtct ggcctcgctt
                                                                     1200
teettttgee etgagtatte teaggaggga eggteeatet agatgteete eaggageaag
                                                                     1260
gacccactgt tetteateag tgacccagga aaatgaagee ceeteetgtg gggacagete
                                                                     1320
agaatggtgg agtccacagt ccctccctga gagacatggt ttccatgagc acagtggctg
                                                                     1380
ctttggagac agtaatcatt ttcatcccca aaaccaaaca cactcctgct caaatggtgt
                                                                     1440
tattgctaaa gcagcttcac tggttagact gaagggccat ggtagcccaa gtgatgagcg
                                                                     1500
gggtagaatg gagcagtcag gagagatctt gttccccgta ggaaactggg catctctgtg
                                                                     1560
gecetgaaca teecaggagg eegategtae agagacetet ggtgeetgae egeagtteae
                                                                     1620
atccacatcc ctggaataga ccatcacagg ctcttcaccc ttggcaggtg gacaccattc
                                                                     1680
aacctgccgg ggcaggatgg acatggtaga gaatgcagat agtttgcagg cacaggagcg
                                                                     1740
gaaggacata cttatgaagt atgacaaggg acaccgagct gggctgccag aggacaaggg
                                                                     1800
gcctgagccc gttggaatca acagcagcat tgatcgtttt ggcattttgc atgagacgga
                                                                     1860
gctgcctcct gtgactgcac gggaggcgaa gaaaattcgg cgggagatga cacgaacgag
                                                                     1920
caagtggatg gaaatgctgg gagaatggga gacatataag cacagtagca aactcataga
                                                                     1980
tegagtgtae aagggaatte ecatgaacat eeggggeeeg gtgtggteag teeteetgaa
                                                                     2040
cattcaggaa atcaagttga aaaaccccgg aagataccag atcatgaagg agaggggcaa
                                                                     2100
gaggtcatct gaacacatcc accacatcga cctggacgtg aggacgactc tccggaacca
                                                                     2160
tgtcttcttt agggatcgat atggagccaa gcagagggaa ctattctaca tcctcctggc
                                                                     2220
ctattcggag tataacccgg aggtgggcta ctgcagggac ctgagccaca tcaccgcctt
                                                                     2280
gttcctcctt tatctgcctg aggaggacgc attctgggca ctggtgcagc tgctggccag
                                                                     2340
tgagaggcac tecetgecag gattecacag eccaaatggt gggacagtec aggggeteca
                                                                     2400
agaccaacag gagcatgtgg tacccaagtc acaacccaag accatgtggc atcaggacaa
                                                                     2460
ggaaggteta tgegggeagt gtgeetegtt aggetgeett eteeggaace tgattgaegg
                                                                     2520
gatctctctc gggctcaccc tgcgcctgtg ggacgtgtat ttggtggaag gagaacaggt
                                                                     2580
gttgatgcca ataaccagca ttgctcttaa ggttcagcag aagcgcctca tgaagacatc
                                                                     2640
caggtgtggc ctgtgggcac gtctgcggaa ccaattette gatacetggg ccatgaacga
                                                                     2700
tgacaccgtg ctcaagcatc ttagggcctc tacgaagaaa ctaacaagga agcaagggga
                                                                     2760
cctgccaccc ccaggcccaa cagccctggg acgaaggtgt gtggcaggaa gcccccagcc
                                                                     2820
agtotgaacc otgggggcag toccaggago cacccaccat gooccaacgg ottocccatg
                                                                     2880
ccaggcagca cacacccctc cctctgggat cagcagacta caggcgtgtc gtcagtgtca
                                                                     2940
gaccacaggg gccacacaga gaccccaagg actccagaga tgcagccaaa cgcgagcaag
                                                                     3000
ggtccttggc acccaggcct gtgccggctt cacgtggtgg gaagaccctc tgcaaggggt
                                                                     3060
ataggcaggc ccctccaggc ccaccagccc agttccagcg gcccatttgc tcagcttccc
                                                                     3120
cgccatgggc atctcgtttt tccacgccct gtcctggtgg ggctgtccgg gaagacacgt
                                                                     3180
accetgtggg cacteagggt gtgcccagce tggccctgge tcagggagga cetcagggtt
                                                                     3240
cctggagatt cctggagtgg aagtcaatgc cccggctccc aacggacctg gatatagggg
                                                                     3300
gcccttggtt cccccattat gattttgaac ggagctgctg ggtccgtgcc atatcccagg
                                                                     3360
aggaccaget ggccacetge tggcaggetg aacaetgegg agaggttege aacaaagata
                                                                     3420
tgagttggcc tgaggagatg tcttttatag caaatagtag taaaatagat agacacaagg
                                                                     3480
ttcccacaga aaagggagcc acaggtctaa gcaatctggg aaacacatgc ttcatgaact
                                                                     3540
caagcatcca gtgtgttagt aacacacagc cactgacaca gtattttatc tcagggagac
                                                                     3600
atctttatga actcaacagg acaaatccca ttggtatgaa ggggcatatg gctaaatgct
                                                                     3660
atggtgattt agtgcaggaa ctttggagtg gaactcagaa gaatgttgcc ccattaaagc
                                                                     3720
ttcggtggac catagcaaaa tatgctccca ggtttaatgg gtttcagcaa caggactccc
                                                                     3780
aagaacttct ggcttttctc ttggatggtc ttcatgaaga tcttaatcga gtccatgaaa
                                                                     3840
agccatatgt ggaactgaag gacagtgatg ggcgaccaga ctgggaagta gctgcagagg
                                                                     3900
```

```
cctgggacaa ccatctaaga agaaatagat caattgttgt ggatttgttc catgggcagc
                                                                    3960
taagatetea agtaaaatge aagacatgtg ggeatataag tgteegattt gaccetttea
                                                                    4020
attittitgic titgccacta ccaatggaca gitatatgca citagaaata acagtgatta
                                                                    4080
                                                                    4140
agttagatgg tactacccct gtacggtatg gactaagact gaatatggat gaaaagtaca
caggtttaaa aaaacagctg agtgatctct gtggacttaa ttcagaacaa atccttctag
                                                                    4200
                                                                    4260
cagaagtaca tggttccaac ataaagaact ttcctcagga caaccaaaaa gtacgactct
cagtgagtgg atttttgtgt gcatttgaaa ttcctgtccc tgtgtctcca atttcagctt
                                                                    4320
4380
ctaccaatgg ggacctaccc cgaccaatat tcatccccaa tggaatgcca aacactqttq
                                                                    4440
tgccatgtgg aactgagaag aacttcacaa atggaatggt taatggtcac atgccatctc
                                                                    4500
ttcctgacag cccctttaca ggttacatca ttgcagtcca ccgaaaaatg atgaggacag
                                                                    4560
aactgtattt cctgtcatct cagaagaatc gccccagcct ctttggaatg ccattgattg
                                                                    4620
ttccatgtac tgtgcatacc cggaagaaag acctatatga tgcggtttgg attcaagtat
                                                                    4680
cccggttagc gagcccactc ccacctcagg aagctagtaa tcatgcccag gattgtgacg
                                                                    4740
acagtatggg ctatcaatat ccattcactc tacgagttgt gcagaaagat gggaactcct
                                                                    4800
gtgcttggtg cccatggtat agattttgca gaggctgtaa aattgattgt ggggaagaca
                                                                    4860
gagettteat tggaaatgee tatattgetg tggattggea ceceaeagee etteaeette
                                                                    4920
gctatcaaac atcccaggaa agggttgtag atgagcatga gagtgtggag cagagtcggc
                                                                    4980
gagcgcaagt cgagcccatc aacctggaca gctgtctccg tgctttcacc agtgaggaag
                                                                    5040
agctagggga aaatgagatg tactactgtt ccaagtgtaa gacccactgc ttagcaacaa
                                                                    5100
agaagctgga tctctggagg cttccaccca tcctgattat tcaccttaag cgatttcaat
                                                                    5160
ttgtaaatgg tcggtggata aaatcacaga aaattgtcaa atttcctcgg gaaagttttg
                                                                    5220
atccaagtgc ttttttggta ccaagagacc cggctctctg ccagcataaa ccactcacac
                                                                    5280
cccaggggga tgagctctct gagcccagga ttctggcaag ggaggtgaag aaagtggatg
                                                                    5340
cgcagagttc ggctggggaa gaggacgtgc tcctgagcaa aagcccatcc tcactcagcg
                                                                    5400
ctaacatcat cagcagcccg aaaggttctc cttcttcatc aagaaaaagt ggaaccagct
                                                                    5460
gtccctccag caaaaacagc agccctaata gcagcccacg gactttgggg aggagcaaag
                                                                    5520
ggaggeteeg getgeeceag attggeagea aaaataaact gteaagtagt aaagagaact
                                                                    5580
tggatgccag caaagaaaat ggggctgggc agatatgtga gctggctgac gccttgagtc
                                                                    5640
gagggcatgt gctgggggc agccaaccag agttggtcac tcctcaggac catgaggtag
                                                                    5700
ctttggccaa tggattcctt tatgagcatg aagcatgtgg caatggctgt ggcaatggct
                                                                    5760
acagcaatgg tcagcttgga aaccacagtg aagaagacag cactgatgac caaagagaag
                                                                    5820
atactegtat taageetatt tataatetat atgeaattte gtgeeattea ggaattetgg
                                                                    5880
gtgggggcca ttacgtcact tatgccaaaa acccaaactg caagtggtac tgttacaatg
                                                                    5940
acagcagctg taaggaactt cacccggatg aaattgacac cgactctgcc tacattcttt
                                                                    6000
tctatgagca gcaggggata gactatgcac aatttctgcc aaagactgat ggcaaaaaga
                                                                    6060
tggcagacac aagcagtatg gatgaagact ttgagtctga ttaccgaaaa gtactgtgtg
                                                                    6120
ttacagtaaa gctaccactc tggctgctag acagcttggc ggttgnaggg agatggactc
                                                                    6180
cttgttagct gacatttggg caaaagcgtc cactggaaag ggcaagctaa atgtagttat
                                                                    6240
tttatcctgt tagaacaaaa attctaatta aaatcgttaa cttgaagagt agaaacaatt
                                                                    6300
gtattttgaa gtctcataca agctgtctga tagagaactt tcaggcagat cccaccatta
                                                                    6360
gcctgtaaac aaaaggtgtg gcaccagcca cctgggacca aataagaatt gaattgtgct
                                                                    6420
tgtccagata tgaacaaata tgtagtgagt atagagttta ccaataatca taacaaatat
                                                                    6480
taaagatttc cttggagtca gaggaaaaaa caaacaatta taatgttgtc tagggacgac
                                                                    6540
atgatacgct acctcctttt tcctgaagtt ttattccatt atattgacaa gatggagaaa
                                                                    6600
gcaagatcat gaaggtgtgc aaatgattct tacggcatgg acaaggattt ttcaatttat
                                                                    6660
tttttaaact gtttccatac cctttcttt tcttgctttt tgtttttgcc attgtgttta
                                                                    6720
cagtttgaga cacaaccagt cattggtggc aggggcatag agtggtcagt ctgaaaggga
                                                                    6780
ggctctctta agagctatgt gccttccaac cagagggaga cccagtagaa agaaaaacat
                                                                    6840
cctgggaaat ccagctacca gggccctccc agtggaggca tcttacattt aggctacttc
                                                                    6900
aagtateete agaaatgtat tetgeaceee eggeeeegee catgetgagg gaaggggage
                                                                    6960
agttgccaat atttgcacca tcttcacatg cacatgttgc aacaagagct tctgggaagg
                                                                    7020
taagcggcat cggagctaga tcacgtttca caattagtgg ttattctttt ctgtgtttgt
                                                                    7080
tttgcacttt aaaaaagaga gaacacatgc aaatgaactt gcttgtgtgt atttgaatgg
                                                                    7140
ctctaagggc tataaattac aaacaaaaca catcccagac attaggagtt cataaagtat
                                                                    7200
atttaatgaa attggtggtt ttaggaagtc aactttagtt ttgctttgtt tgcatgtcca
                                                                    7260
ctaatttttt ttattttgat attagtcttt tttaaaaaat tttacagtag tcattgaaag
                                                                    7320
```

```
ttatgtttct ttgtttactt catttttcc ctctaattat ttaagattgg aacaaaagta
                                                                     7380
taaatattat ttatttgagg tagaattttt ttcatgtagt ttcttaatat atacttgaag
                                                                     7440
                                                                     7500
gaaatgttte accttatttt tggtetttgt ttatteattt agaecetgea agttgattet
cattgccaga ttccattacc ctttcttcct cataggtagt aattaccaat gtaactaagc
                                                                     7560
atttgtgttc tgatatctga ggccagtaac tattaatatc tagttctcag aggcatttgg
                                                                     7620
aaaggttatc ttaaatggct acctaaattg aaatcctttt cagaaaaaat ataattgcaa
                                                                     7680
                                                                     7740
gtaggtagga gtggcctaaa ttgtctaatg taataaagtc agacaaaatg cacactttat
agtttcaaga ttttcagtaa ataaaatctg tccattccta cctggacatg tcccattaaa
                                                                     7800
aagtggaaga ttttaaataa tttctttaca gatgttttat ttaaacaggt agcacaatct
                                                                     7860
actaatgttg tgtgatttgt gttatactgg ttgtaattaa tttttttaat tcatgaacta
                                                                     7920
geggaaaatt tattaaatta aetattaaet aeatteaeet tgtaaattae tgtataaaae
                                                                     7980
ttgttgacaa tgcactgact ttagaaagat gttaatgtac ataaatagag tgtaaataaa
                                                                     8040
atagtgttga tgtactgaaa tatgaactgt atcaaaagta ttggtaattg tatatggggt
                                                                     8100
gtacctgttt atctgttaac tattatccaa acaaattaaa tactgtggtt gcctctatgt
                                                                     8160
gctgtttttc ctcatacaag taaacacaga aagtcaaatt cttcagcctc cctctctgtg
                                                                     8220
atcctgtttt aattctccta cttgaataat ttctttctga cttgtataca gaggggatgc
                                                                     8280
ttcatctctg aggttggaaa ctctgtagag caggattccc caactcctgg gctacagacc
                                                                     8340
agtactgtcc atggcctgtt aggaaccggg ctgcgcagca ggaggtgagt ggcgagctgt
                                                                     8400
atttatagec geteceett geteceatta eegee
                                                                     8435
```

```
<210> 6205
<211> 2830
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (32)...(2331)
<223> similar to gi5640105 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6205 gtgaaatccc attctctggc tggagacaca gatggcctca aatgagagag atgctatatc 60 gtggtaccaa aagaagattg gagcctacga tcagcagata tgggaaaagt caatcgaaca 120 gactcagatt aagggtttga aaaacaaacc gaaaaagatg ggccacataa agccagactt 180 gattgacgtt gacttaatca gagggtcaac atttgccaaa gcaaaacctg aaattccatg 240 gacatctctg actcggaagg ggcttgttcg agttgtattt tttccattgt tcagcaattg 300 gtggattcag gttacctctt taagaatctt tgtttggctg ttactacttt atttcatgca 360 agttatagca attgtcttat atttgatgat gcctattgtg aacataagtg aagtacttgg 420 accettgtge ettatgetae teatgggaae tgtecaetgt caaattgtgt etacteagat 480 aacaagacca tcaggaaaca atggaaatcg aagaagaaga aaattacgaa aaactgtaaa 540 tggtgatggg agccgagaaa atggaaataa ctcctctgat aaagtcagag gaatagaaac 600 tttggaatct gtacccatta ttggtggttt ttgggagact atctttggca acaggattaa 660 aagagtaaaa ttaatatcta acaaagggac tgaaactgac aatgacccaa gttgtgtcca 720 tcctatcatt aagaggagac aatgtcgacc agagattaga atgtggcaaa caagagagaa 780 agcaaaattt tcagatggag aaaagtgccg tagggaggct tttaggcgtt tgggtaatgg 840 ggtgtctgat gacctgtcaa gtgaagaaga tggtgaagca cggacacaga tgatattatt 900 gcgtaggagt gtggaagggg cctcaagtga caatggttgt gaagttaaga atagaaaatc 960 aatactttca aggcacctaa actctcaggt aaagaaaacc actacaaggt ggtgtcatat 1020 tgtgcgggat tcagatagtc tggctgaatc agaatttgaa tcagcagcct tcagccaggg 1080

```
ctctagatcq ggtgtgagtg qtqqctctcg aagcctcaac atgtcaagaa gagactcaga
                                                                   1140
aagcaccege catgactegg agactgagga catgttatgg gacgacetge tacatggeee
                                                                   1200
agagtgccgg tcatctgtca ccagtgacag tgagggggcc catgtgaata cccttcactc
                                                                   1260
agggaccaaa cgtgacccca aagaggatgt ttttcagcag aatcatttat tctggcttca
                                                                   1320
gaattcaagt ccttcctctg atcgagttag tgcaataatc tgggagggga atgagtgcaa
                                                                   1380
aaagatggat atgtctgtgt tggaaataag tggcatcatc atgagcaggg tcaatgccta
                                                                   1440
tcagcaagga gtaggttatc agatgctggg aaatgttgtc actattggat tagcattttt
                                                                   1500
tecattetta categaettt teegtgagaa gageettgae caactaaagt ceattteage
                                                                   1560
tgaggagate ttgactetet tttgtgggge accaectgtt acaectatta ttgttttgte
                                                                   1620
gataattaat tittitgaaa gattqtgtct tacttqqatq tittittca tqatqtqtqt
                                                                   1680
gggcagagag aacatataaa acagagattt ttatttgcaa aactcttcag ccatatttac
                                                                   1740
ttctgccagg gaaagctagg gaaatatgaa atacctcatt tcagacttaa gaaggtggag
                                                                   1800
aatattaaaa tatggttatc actgcgttcc tatctaaaga gacqggggcc acagcgttca
                                                                   1860
gttgatgtgg tttgtatcct cggttttcct actgacactt tcgattgctt tcatttgttg
                                                                   1920
tgctcaggtt ctccaaggga cataaaactt tcctggaatg atgcttatta actggggagt
                                                                   1980
ttttgatctg ggggaaacag ctttactact ttttttattg cgtctggcct cactggggtc
                                                                   2040
2100
tcttaagatg gaaaaaaagc caaataagaa agaacagctt actctagtaa acaatgtatt
                                                                   2160
aaagctgtcc accaagttgt tgaaagagct ggacacacca tttaqactct atqqactqac
                                                                   2220
aatgaatccc ttaatctaca atatcacaag agtagttatc ctttctgctg tctcaggtgt
                                                                   2280
tataagtgat cttctaggat ttaatataag actgtggaaa attaaatcat aagctgagtt
                                                                   2340
aaatgeetgg acteteeect ggetggtate aaaacttace tateaaggaa agtgatgaet
                                                                   2400
gcagaaacca gtgagatacc cacctgcttg ttcacatgca caggtgctct cagctctgcc
                                                                   2460
aaagcgaatg aatggtgttt ccggaggagc aagtcctttt ccaactgggt gtgcatgcta
                                                                   2520
aaaacctgta ttttcatgct tttcaaacaa catgaatagt cagctgacta aagactgtgt
                                                                   2580
gtgttgtggt aacacaaaga caattttgta agtttgcgct tcagtactgt gacagttatg
                                                                   2640
tttactggac atagtetttt gggcaactat gatagatgec caaagcatga agcaaatate
                                                                   2700
ttttattgga aatatgcaaa ttcaatactt ttccattata gtctatagaa ctggagattt
                                                                   2760
cattteteta teaaagagag ateaagegaa etattttagg ttaaateega ataaaagaae
                                                                   2820
tttactggaa
                                                                   2830
```

```
<210> 6206
<211> 895
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (694)...(150)
<223> similar to gi4929763 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
gcagcatgag agcactgggc agccactttc ccttttccca tctttaagtc atttcgaacc
                                                                      480
acaagaatca tettgtacte ecegetgtet eceaagatge ttgetteact tteagtatet
                                                                      540
gtgtgtgtct tgctcgtctt gcttttgggg agcatcccaa agcatactcg aaggctccag
                                                                      600
cccaggcaca tgccacaagc aactccaaca gccaagccga gtgtactggg atgagccaaa
                                                                      660
tattccataa ccaaggattt ggagggcatc attaatttac acagctgaaa gcacagtggt
                                                                      720
cctgaaaaat gtttgaagca ctgaaataga attaattgct ggatgatggg gatgcaacag
                                                                      780
ggtcctcaat ttctctctct tctgatgaac atcgagaata ggtggtagaa ggcattggga
                                                                      840
catcaacact agttgatggt ttagcaagca tagtgttgtt cttccagctc gtgcc
                                                                      895
```

```
<210> 6207
<211> 4649
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1388)...(4427)
<223> similar to gil469167 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6207 gcgattaaat tgggtaaccc ccgggttttt cccgtccccg cgttgttaaa ccccggccca 60 tgaattgtta ttccccccc tataagggga attggggtcc cggcccccc ccgaggtttt 120 ttttttttt ttttttca gactttcagc ccctttaatt aggtgctctg agaagaggtc 180 agaatggcag gcagggggtg gggaaggcgg tgcttcttga gccccactta gcaactggtc 240 actcatcctc tggcagctgg atcttgctgg ggtcgaagca gttggattcc atgatgggaa 300 ggccattggc ctctcggtat ttcacaagcc tctcagcttc gcggcgggac cactctttca 360 teetgtagte aggeagatag geeacaaagg tgetgeeaag gaeeaggatg atggagaege 420 caaagaagaa gacaagtcgc atgttccaga cgtccaaaac ggggtccttg tcataaccat 480 gggagtctgg gttcttctca tacaagtttt cgtcctcggg ttctgggtcc tcttgccacg 540 gtgtggtcgg ttctgggggc cgctttcccg ccacagcgga cggggcgacc acagtcctgg 600 agaagctaga ttcccagcgg acgcgggcgg ccgggagccc tcgcgtcgcc gctgccgcca 660 aaagacggcg agcgctcaaa ccaaacagcc cagccgccat gacagatggt gctgcagggt 720 ctcaggggcg gggaaagaaa tgcgactgtg cgcagctgca gtgggtgcga gcgcgacaat 780 categocceg cotecgocac gotatatagg toccagatot gatttggttt tocaatgagg 840 cggggcgttg agcaaccctc tttgcctcca gttgtcgtgg cttcgtgggg ccaaccattt 900 teggecagge tgagaaattt ettattgatg ggtetgetea ttteetgeat aggaagaaat 960 cggtgacatt tgggtggata cagttcccag ccaatcgccc cgagttccct cgcccactgg 1020 ggaaagaggc agacgtccgc tagtctttca tcttcaaagg aaatcaagct tctaaaaagc 1080 gggccctgcc gaattggcta atagctactc cttttctcca ctaggggagc gttcgcaagg 1140 ggtgtgggga ggtggccagc gcttgccaat cagaggaggc cagggctgtc ccctaqcqqq 1200 cggtgaccaa tcgccggggc cggccagagc gcgcttcctt agtaggtgga tggtggtcgg 1260 agegeegact cecttetegt egtegeeatt ttgagetggt gaetgtggee ggetgggagt 1320 aggeggeagt gagttteeet gggagggeag egegettgge getteteece teeceeegat 1380 ctgcctccag tctcggactt ggttgttgcg cgctccggct ccggctgagc tgggagagtt 1440 ggaggaggtg gcggcgggca gaggtgatgt ctgggagccc ttccttgaca gcccgggccg 1500 agaagagtcc ctgcaggaag catcacccag gctggcagat catggtagca gcagcggggg 1560 tggctgggaa gtgaaacgga gccagcggct gaggagggc cccagcagcc cccgaaggcc 1620 ctatcaggac atggagtatg aaagacgtgg tggtcgtggt gacaggactg gccgctatgg 1680 agccactgac cgctcgcagg atgatggtgg ggagaaccgc agccgagacc acgactaccg 1740

ggacatggac	taccgttcat	atcctcgcga	gtatggcagc	caggagggca	agcatgacta	1800
tgacgactca	tctgaggagc	agagtgcgga	ggattcctac	gaggcctccc	cgggctccga	1860
gactcagcgt	aggcggcggc	ggcggcacag	gcacagcccc	accggcccgc	cagggcttcc	1920
				gcaaggggag		1980
aggaggagga	tgaggaggag	gaggagaagg	ccagtaacat	cgtcatgctg	aggatgctgc	2040
				gtcgcacggc		2100
				ccggggcttc		2160
				caatcagcac		2220
				gcccaagatc		2280
				agagaagtgc		2340
				cacgaggctg		2400
				tcccctgccg		2460
				ctcggagcca		2520
				cagcaccatg		2580
				cgtgcgcgtc		2640
				ctccaccatc		2700
				tatcgacggc		2760
				caatgaaggc		2820
				gtgggccatc		2880
				agcctgccgg		2940
				acagagtett		3000
				ggaaccaaag		3060
				tctgtgtcga		3120
				caatcagccg		3180
				atgtcacccg		3240
				ccaccggcta		3300
				tctacctacc		3360
				tatgacccca		3420
				tggggagagg		3480
				aggggcaccc		3540
				acagattgcc		3600
				caaaaatagc		3660
				tgcagatgct		3720
				cagcatggat		3780
				ggcagcctac		3840
				ggaggagaag		3900
				cagcaaagag		3960
				gattcaccgg		4020
				ggagcaaatg		4080
				gccgccagag		4140
				gcagcctact		4200
				gggctggaaa		4260
				ggcccaaaca		4320
						4320
				ctcaaccgag		4440
				ccagtgagca		4500
				aggacagagt		4500 4560
				gccagagagg		4620
			aarryggerg	ggatcacgtc	cigilligia	
acaaaagccg	aaaagtctga	aaaaaadad				4649

<210> 6208

<211> 2830

<212> DNA

<213> Homo sapiens <220> <221> misc_feature <222> (452)...(2082) <223> similar to gil045197 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 6208 gtcttggtag cggaggcacc cgaatgctgc ccgggtgagt gtgatgagaa gccattagag 60 ggttgagtga agggaaagga tatccaacga gaacctcctg ccctgtgtct catgaagagg 120 cagtatttca agaagaggct taaagctgag agtgttttgc taatcagtga agatgtgact 180 aatgagetge tggggaagte aageetteta tgaggaagee aaggeecage agagetgaga 240 tgtgactgca gagccgtcca accccagtcc tgtgaccttt ctctggtgcc tgatacctct 300 cagcatttga gggccttttc tcttcctgct tcatctctaa aggtccttct aggagagagg 360 tgaaagaaac ctggcaaaga aaacggtctc gacaatgagt aggccaccca tcactactaa 420 ctacagatga cttgccattt catttacaaa gatgtcttct gctgctgaaa atggagaggc 480 agcacctgga aaacaaaatg aagaaaaaac ctataaaaag actgcatcat ctgctattaa 540 aggtgctatt cagctgggaa taggatacac agtggggtaa tctcacttcc aagccagaac 600 cgagatgttc ttatgcaaga cttttatgtg gtggaaagtg tgttcctacc cagcgaaggg 660 agcaatctga ccccagcaca tcactaccca gactttagat ttaagacata cgctccatta 720 gcattccgat atttcagaga actttttggt atcaagcctg atgattactt gtattccatc 780 tgcagtgaac ctctaataga actgtctaac cctggagcca gtggatcctt gttttttgtg 840 accagtgatg atgaatttat catcaaaaca gttcagcaca aagaagctga gtttcttcag 900 aagctactgc caggctatta catgaattta aaccagaatc caaggactct tttgccaaaa 960 ttttacggac tgtattgtat gcaatcagga ggcattaata tcaggattgt ggtgatgaac 1020 aacgttttgc cacgctccat gagaatgcac tttacatatg acttgaaagg ctcaacgtat 1080 aagcgaagag catcccgtaa agagagagag aaatccaacc ccacatttaa ggacttagga 1140 tttcctgcaa gacatggcac ggaagggttg tattttgata cggaaacata caacgcgctt 1200 atgaaaacac ttcagagaga ctgccgggtg ctagaaagct tcaagatcat ggattatagc 1260 cttctgttgg gaattcattt cctggaccat tccctcaaag agaaagagga ggagacccca 1320 caaaatgtgc ctgatgctaa gcggactggg atgcagaagg ttctctactc aacagccatg 1380 gaatctatcc agggtccagg gaaatctgga gatgggataa tcacagagaa cccagacaca 1440 atgggaggca ttccagctaa aagccatagg ggagaaaaac tacttttatt tatgggcatt 1500 attgacattc tgcaatcata taggttaatg aagaagttag aacattcctg gaaagctctt 1560 gtttatgatg gggacactgt ttctgttcat agaccaagct tttatgcaga cagatttctt 1620 aagttcatga attccagagt tttcaagaaa attcaagctt tgaaggcttc accgtctaag 1680 aaacggtgca attcaatcgc cgccctaaag gccacttcac aggagattgt gtcctcaatt 1740 agccaggaat ggaaggatga gaagcgggat ttgctgactg aaggacaaag ttttagcagc 1800 cttgatgaag aagccctggg atcccgacac aggccagacc tggtccctag cactccatca 1860 ctgtttgaag ctgcttcctt ggcaaccaca atttcatctt cttccttata cgtcaatgag 1920 cactatecae acgaeaggge ctateactet tattteaaac ageaaagggt tacetteeag 1980 ttcaacattt accttggaag aggggaccat ctacttgacc gctgagccca acactctgga 2040 agtgcaggat gacaatgctt ctgtgcttga cgtctattta taagtgaaaa tggtgatcac 2100 ctaagcacat ggatgagacg tgagcacagt tatggcagag aagtttctcc gcaccagaat 2160 tatccacage aacttggetg ageceeacta cacacagaga aatcatcaac etgaettaag 2220 agttttcaag atgtcaactt caggctgatc agcagatggg atgtgaaaaa tactacccta 2280 ttctatcatt tgctgttgct tgctgaactg tgaagaactg catgaactat atttaaqctq 2340 ctttctgtac cattgccaat cacctttttg gagttggaag tgctattttc ctatggactt 2400 ttgcattatt tcattgtgca tgcatccagt gattatacat aagcaacata tgtaatctgc 2460 ttatatattt ttaaaaatcc atccacacac attggtaaat taagtataaa tccctttgcc 2520 aaaattatag ttcatatgtc attgaaagtt taaattggtt tcatttaaag atcaatatac 2580 ctaggtcctg cccttcactt tatagaaaac tagccttcta taaagatttt ttcactgttt 2640 acctagtgaa atgagaaaag caaagctatt tataaaaggc cttatgtcgt gtacatacat 2700

```
tgtctttgaa atatttgtga tctagtttat tgcttgtaaa agagaaatta tataatttat 2760 ttagtaaaat tatagttcat tactactgta aactatagtt ttgtgagaga aataaaatat 2820 tttgttctca 2830
```

```
<210> 6209
<211> 2086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1958)...(528)
<223> similar to gi632968 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6209 ggggtttttt tecaageest ttaatttggt tteceeegg gtttteeest eeeceegtt 60 tttaaacccg ggcccgggat tttatttttg gggccccatt aaaaaaattt ttctttccc 120 ecceeggtt tttaaatttg gttettttaa aagggeecee etttttttt tttttggggg 180 tcaaatgaag cacgttattt tatttcacaa agactgtaca aaattcctta taaaacatgg 240 ggtagatgcc acctggttac ctcactcggc ccccatccaa ctccgtatga gggggcaggt 300 gagggtggaa actgtgtgga tggaatagta ttatgtacaa ggcaggggtt gaagtgatag 360 gtacaagttc tttcatattt acactatttc acatattcac aggtatatag agagccagga 420 480 cacccactgc tataaaagat gcagggggc ccagggcctg atcgtcaccg actgatatcc 540 cgactggagt cccacaactt gttgggcggc tcagcccgaa ggcgggcgaa gaaaggatgc 600 tgaagggctt cacccaaggt cagccgctta gctggttcat actctagcat gctttcaatc 660 agatcgaaga gctggtggtg ttcctctgcc tctgaggtca gataccgccg cagcggtttg 720 cagtteteac gaacatageg eccagetgat gtgtteteat eccaateeag gegaeeeegg 780 taaaaatatt tetgetttet tgtetttegg atcateeggg aagggatagg acceaagate 840 ctttccatca tggctagatg ctctctgttg tcatgggtct ggaagagggt gaatcccaca 900 tagtattcaa agatgatgca gcctatactc cacacatcac aaggctgtga ccagcccaac 960 tcaaggatga cttctggtgc tcggtaatgg cgagtggaga caatggtgct atggtgctca 1020 tggtcaaagg tggcactgcc aaagtctacc acccgcacag ctgtgctctt cacactgcgc 1080 tcatctcgct tcttctctag gttgtaggtg agctcatagt ctgaattcac aaacagaata 1140 ttttcaggct tgaggtctgt atgtgtcagc ttgttatcat ggaggaactt gacagcctgg 1200 cacagetgga aggecatgtg gegeaettgg tggatggggt agggcaggta gttgttgtet 1260 ttgaggaaat cgaaggtgct aaggcccaga agctcaaagg agatacacat gtggccatgg 1320 tagtcaaacc agtcaaacat ctggacacag aggttcttgt tgtcagggtc tttctcattg 1380 attttctcta gcacgttgat ctcaagtcga gctgcttcct tgtacttctc cacattctta 1440 atgatettea gggcaacteg agececacee etgtaagttg geaggagagg etgegatggt 1500 caacacattg tacaactcgg ccgaaggtcc cctctcctaa ggtgctaacg atttcatcga 1560 agatgagegg ctaaatgtee ggetgegeet ceteegeegt etgtgettee teeggetget 1620 gcgctggctg cggtaactgc tgttctcccg ctgatattca taggaatgcc gatagtctgt 1680 gtcatagtag gcatctcccc gatcccggct ataatcgttg ccgtctgtag ctgccacagt 1740 atcgccggtc atacaccctc cggtcggacg aacgatcatc ataactgctt cgagaacgga 1800 catggtaget gteetetege egacgeegte gtgteeggte actaetaett gaceaggage 1860 gacttetteg tegettatge ttteggetee gatagtgtte aeggtaacte eeeggetge 1920 ctcgctctga ggagtggtac cttcgaggat gcggcatcgt tctggcggcg aggcccgtgc 1980 gcttgtccca caggaagtcc gtgatggcgg cgacactgcg gccggagtcc cggcaccccc 2040

```
<210> 6210
<211> 2381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (153)...(1824)
<223> similar to gi32080 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6210 cccatcgtag accctagtca gtgtggtgga attcggtccc tccctggctg cgggagagac 60 ggaggtagag ggaggacaca gagccgcgcc gcccgcacca cagaccttcg cctcgccccg 120 coggttoctc accotogggg agcaacatgg cagataatot cagtgataco ttgaagaago 180 tgaagataac agctgttgac aagactgagg atagtttaga aggatgcttg gattgtctgc 240 ttcaagccct ggctcaaaat aatacggaaa caagtgaaaa aatccaagca agtggaatac 300 ttcagctgtt tgcaagtctg ttgactccac agtcttcctg caaagccaaa gtagctaaca 360 tcatagcaga agtagccaaa aatgagttta tgcgaattcc atgtgtggat gctggattga 420 tttcaccact ggtgcagctg ctaaatagca aagaccagga agtgctgctt caaacgggca 480 gggctctagg aaacatatgt tacgatagcc attcgcttca agctcagctt atcaatatgg 540 gtgttattcc taccttagtg aaattactgg gcatccactg ccaaaatgca gctcttacag 600 aaatgtgtct tgttgcattt ggtaatttag cagaacttga gtcaagtaaa gaacagtttg 660 ccagtacaaa cattgctgaa gagctagtaa aactcttcaa gaaacaaata gaacatgata 720 agagaaatga tttttgaagt tcttgctcca ttggcagaaa atgatgctat taaactacag 780 ctggttgaag caggcctagt agagtgtcta ctagagattg ttcagcaaaa agtggatagt 840 gacaaagaag atgatattac tgagctcaaa actggttcag atctcatggt tttattactt 900 cttggagatg aatccatgca gaagttattt gaaggaggaa aaggtagtgt atttcaaagg 960 gtactetett ggateceate aaataaceae eagetacage ttgetggage attggeaatt 1020 gcaaattttg ccagaaatga tgcaaattgt attcatatgg tagacaatgg gattgtagaa 1080 aaacttatgg atttactgga cagacatgta gaagatggaa atgtaacagt acagcatgca 1140 gcactaagtg ccctcagaaa cctggccatt ccagttataa ataaagcaaa gatgttatca 1200 gctggggtca cagaggcagt tttgaaattt cttaaatctg aaatgcctcc tgttcagttc 1260 aaacttctgg gaacattaag aatgttaata gatgcacaag cagaagctgc tgaacaattg 1320 ggaaagaatg ttaagttagt ggagcgtttg gtggaatggt gtgaagccaa agatcatgct 1380 ggtgtgatgg gggagtcaaa cagactgctg tctgccctta tacgacacag taaatcaaaa 1440 gatgtaatta aaaccattgt gcagagtggt ggcatcaagc atctagttac catggcaact 1500 agtgaacatg taataatgca gaatgaagct cttgttgctt tggcattaat agcagcttta 1560 gaattgggca ctgctgagaa agatctagaa agtgctaaac ttgtacagat tttacataga 1620 ctgctagcag atgagagaag tgctcctgaa atcaaatata attccatggt cctgatatgt 1680 gctcttatgg gatctgaatg tctacacaag gaagtacagg atttggcttt tctagatgtc 1740 gtatecaaac ttegeagtea tgagaacaaa agtgttgeee ageaggeete teteacagag 1800 cagagactta ctgtggaaag ctgagaactg cccgatacac ggcatcatcc catctctaat 1860 tteccetetg tectecatee ageggettet teegetteat tetetaceat accaettgtg 1920 catgcatgtg atgttctaat accaattgaa gaaccgctgt aggtacctcc ctaataagat 1980 ttctaaacct atagttagtg tgatcatgac tttgtcaaag gcaagtctcc acccataacc 2040 gttctcttgt attcctgttg cttgagctac attaagtaga atgtgcatgt tgtagtccta 2100 tgatgatgta aacttggtac tacataatga cttgctccac acatgcagta aactacataa 2160

```
<210> 6211
<211> 2941
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(1959)
<223> similar to gi577299 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6211 tttcgtgccg cgggctccgg cgagggacag acgcaccgat cgccggaggg acagacacac 60 gaccacgegg egecacegee caegeeteea eecaceggeg eecaagteet eecegegeeg 120 cetectetgt atggeacaaa ettteeteee gggaeggaae aegetgeete agggageeeg 180 cgaccgcgcc ttctcctccg ccggtcccat acgctgctga aatgggttgc ggattgaaca 240 agttagagaa acgtgatgaa aaacggcctg ggaatattta ttcaactttg aagaggcctc 300 aggtggaaac caagatagat gtgtcctatg aataccgctt cctggagttc acgactctga 360 gtgctgcgga gctccctggg tcctcagcag tgaggctggc ctccctgcgt gacctgcccg 420 cccagctcct ggagctgtac cagcagggct tctcgctggc ggccctgcac cccttcgtgc 480 ageceaceca tgagegggag aagaegeeee tggageacat etttagagee ateetgatea 540 agaaaaccga cagatctcag aaaactgatc ttcacaatga aggctacatc ttggaattag 600 attgctgttc ctccttagac cacccgacag accagaaact catcccagag ttcattaaga 660 agatccagga ggctgcaagc cagggcctga aattcgttgg tgttatacct cagtaccatt 720 cctctgtgaa ctcggcaggc agcagtgctc cggtgtctac tgccaacagc accgaggatg 780 ccagagatgc aaaaaacgca cgtggggatc acgcgtcact ggagaatgag aaaccgggga 840 ctggggatgt gtgcagtgct ccggctggga gaaaccaaag cccagagccc agctcaggcc 900 ccacgagggg aggtgcccct cgccaagcag cccagctcac cctccggaga gggagatggt 960 ggagaacttt caccacaggg ggtgagcaag acactggatg ggccggagag caaccccttg 1020 gagggtgcat gaagagccac tctcagggaa aatggagatc ttcacccttt tcaacaaacc 1080 gaagagccat cagaagtgcc ggcaatacta ccctgtcacc attcctctcc atgtctccaa 1140 gaatggccag acagtgagcg gtttggacgc caactggtta gagcacatga gcgaccactt 1200 ccggaaagga ggcatgctgg tgaacgcagt cttctacctt ggaatagtga atgattcctt 1260 acatggcttg acagatggag tattcatctt tgaagctgtt tccacagaag atagcaaaac 1320 catacagggc tatgatgcta ttgtggttga acaatggaca gtcctggaag gtgtcgaagt 1380 gcagacagac tacgtgcccc tgctgaactc gctggcggcc tatggctggc agctcacctq 1440 tgtgctacca actcccgtcg tcaagactac cagcgagggg agtgtatcca ccaagcagat 1500 tgtctttctt cagagaccgt gtctacctca gaaaatcaag aagaaggaat cgaagtttca 1560 gtggcgattc tccagagaag aaatgcacaa caggcagatg aggaaatcaa aaggtaaact 1620 cagtgccaga gacaaacaac aagcagaaga aaatgagaag aacttagaag accagtcttc 1680 caaagctgga gacatgggaa actgtgtttc aggacagcag caggagggtg gagtctccga 1740 ggagatgaag ggccctgtcc aagaggacaa gggagaacag ctgtcccctg gtggcctgct 1800 gtgtggggtg ggtgtggagg gtgaggctgt gcagaatggt cctgccagcc acagcagggc 1860 cctggtgggg atttgcactg ggcactccaa tcctggagag gatgccaggg acggggatgc 1920 tgaggaagtc agagagcttg gtacggttga agaaaactga gtcttgggca atttgtgcta 1980

```
aaactaggtg agttgccaaa cccaaggcat cttaccaaca gctggtttgg gggctggttt
                                                                 2040
ccctggtgtt gtgtgttacc taccctttgg cttggcttga cctctccttg tgagctcacc
                                                                 2100
tgagecetee cagggecagg tteetgacag tgttggtttt tgeacateca etggaaaggt
                                                                 2160
gtcattaatg acccagtgtt agaatgcaag aggtcaggtt attctagccc tcatggctga
                                                                 2220
aggcccagtc ctggctccac cactcctcca gccagagggt ctggaccatc cagtgcctgt
                                                                 2280
cctcgccaca gggcctccag ggagcattcg ggtcaaatcc atqqacaccc tqqqctacaa
accaaggetg etgtteatee cacategtgt ggggeagtgt ceateceetg cagetaettg
                                                                 2400
gtgacttaac aactccagga gccctgtcag ctgccctcct ccacctaaac cccttcqact
                                                                 2460
2520
ctcaaaatag tcctatagat actggtaatc tggaaatgaa gaagtaattc tgtctctgca
                                                                 2580
cctacttttg cagaatgttc aaggaagtat tctgtgttag tattaatgcc aaaaagttgt
                                                                 2640
ttttaaaggt tttgtactca gcacatcata caaaccacat tacttctgtc acttcagggc
                                                                 2700
atcgggactg gctggcgccc ttgttatgtg ctattttaat cagtgtaaca ttggtcaagt
                                                                 2760
tgttacccat gtatgctgtg tttatcatgt gtatatcgtc cagaaagtat taaggcttta
                                                                2820
ggtagatgca actggcgaac cttggagagg gaatgctgat tgtcttgacc aaacccacag
                                                                2880
cctgtctctt ctcttggtta gttacttacg gcaataaatc atctatgagt taaaaaaaaa
                                                                2940
                                                                2941
```

```
<210> 6212
<211> 2206
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2207)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2093)...(1184)
<223> similar to gill17984 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6212
ttttttttt ttacagctgg agaagttact tttattcttg cagttttata ctaggaagtc
                                                                       60
aacatttaat aagccatcat ccacaattga ttaaaaatgt ttaatcctta aattgtgcat
                                                                      120
caatatecta tgactecaaa ttttatttat caeteteett caagtetgaa gaaaatgatt
                                                                      180
aatttggtaa gttccacaga cagtacagtc ccactgacat aacatttagt atgatgtcct
                                                                      240
actctcatat tagaattaag gacagccagt atcaaactgg cctgaaacct gattgtgttc
                                                                      300
ctggttcaga atacctgtag taaatctgta aatccacacc aagacacaac attaaactag
                                                                      360
ggtgtgtata tcttataaaa accttttcac agtaaaaatc aacattaaaa ttttaccaaa
                                                                      420
ttccaacatt atggtttttg aatccaatta agctttcaaa atgcctgatt agctgtgaat
                                                                      480
taattataaa taacttcatg tagtttgccc agcatttcaa aatggttatg gactatcatg
                                                                      540
tttaaaatgt caaagtatgc tatacatatt gcacttttct gctaggctgg gctagtatct
                                                                      600
tccatggcaa gatcctcaaa ctactgaata aaatacactt ttaaatcaat ataggtactt
                                                                      660
gattaatttc cctgaaatta tcaacatcat taccaaaatc ttccaggatt ttgtaagatt
                                                                      720
tgattcctta aatacagttt taaagttaaa cttatggagg gaaaaaaacc ctcatagatt
                                                                      780
gactgtaaat tttacgtcct tttttggtcc ctcaatgacc aaagagaatt ttaaacaaat
                                                                      840
tatgcttcat gtttcctggc ttaataaaaa gctacaattt ttattatcca aattaagaaa
                                                                      900
```

```
tattatacta atcaaaagct attaattttg aaatgtctat gtatgtctgt ctgtaggtcc
                                                                      960
ccttagaacc tttccaaaca tttataatca agagatttta atcaattatg tactagaatc
                                                                     1020
atattaaaga aaaacttatt ttgcaaaaat aaaatcactt tccaatatgc ttgacagaaa
                                                                     1080
caagctattc attttcattt gtgttccact gaagacatta ctgaaatctg tccaatggtt
                                                                     1140
tatttccaag tggtccacta tggaattctt cggaatgttt taagattggc tgtagctaga
                                                                     1200
gttctgactt ccatttggac cetgetetee tteactgttt ggaggtggtt ttggttttgg
                                                                     1260
catcttacta agaatggttg ccatctcttt tctctcatcg aaattcttcc actgctcata
                                                                     1320
tagttttaaa ataaccetga ttatttccaa aatettttcc atatccacag aaagctcage
                                                                     1380
aaaccattgc ctggcatctt tctgctgtac aacacaggct acatgtaggc aagctaaagc
                                                                     1440
tatcatgaaa ggaggataca gtaggcaaag atccgttctg taggtatcat tcactatcct
                                                                     1500
ccatgcaagg ggaagcaaca tgtcttcttg gcccatgtcc tgcacatact ggagcaaagg
                                                                     1560
tctataagga tgatacacta tcaagcaaca atccattagt tctaacagat agaattcaca
                                                                     1620
ttctaatata tgattcatcc tataaggaaa ttcctttgga aaggcatatg aaaatctagt
                                                                     1680
ttttaataca gaagtagcag cagcaatcaa tcttgtattt gaaactactc caaattcctc
                                                                     1740
tactttggat gccaaaaaca cacatgtagg agccattaat acaggatcta tacttttcag
                                                                     1800
agaatacctg gcatagaatc tcttgaaata taccgtagca gtggcaataa cttgttgtct
                                                                     1860
taatttaaga tgttcaccta atgcttggat aacatttgta aaaaatattt gtaacttcca
                                                                     1920
atattettee tetgagagaa aetttaaate ettttggege teetteaaca gatettgttt
                                                                     1980
atccaaaatc cattgcaaat agtgggagct ctgccaaaag ttccctgcca tggaacacag
                                                                     2040
ettgeeetga taaaaaagea eeageeggeg gageggeeeg eggagegaee ataqaeeeag
                                                                     2100
cccgtccggt aaccgcgctc ctcgatcaaa tcagctcqqc tcqactccqc tccqcqtacq
                                                                     2160
cgtgggtctn cccgggantt tcggaggttn tcgagttqnt tcagat
                                                                     2206
```

```
<210> 6213
<211> 3572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (142)...(1983)
<223> similar to gi5354054 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6213
gacgctgaga ggcaggaggc actagggatc gtccgcagga ttgggactga tacagaggcc
                                                                      60
gccacggagc ccgccggagc caccgttcct gctgctgccg ccgctgcccg aatcggaacc
                                                                      120
gtcgggccgc agccgccggc aatgccgcga aggaagagga atgcaggcag tagttcagat
                                                                      180
ggaaccgaag attccgattt ttctacagat ctcgagcaca cagacagttc agaaagtgat
                                                                      240
ggcacatece gacgatetge tegagteace egeteeteag ecaggetaag ecagagttet
                                                                      300
caagattcca gtcctgttcg aaatctgcag tcttttggca ctgaggagcc ctgcttactc
                                                                      360
taccagaaga gtgacccgta gtcagcagca gcctacccca gtgacaccga aaaaataccc
                                                                      420
tcttcggcag actcgttcat ctggttcaga aactgagcaa gtggttgatt tttcagatag
                                                                      480
agaaactaaa aatacagctg atcatgatga gtcaccgcct cgaactccaa ctggaaatgc
                                                                      540
geettettet gagtetgaca tagacatete cageeccaat gtateteacg atgagageat
                                                                      600
tgccaaggac atgtccctga aggactcagg cagtgatete teteateege eccaagegee
                                                                      660
gtcgcttcca tgaaagctac aacttcaata tgaagtgtcc tacaccaggc tgtaactctc
                                                                      720
taggacacct tacaggaaaa catgagagac atttctccat ctcaggatgc ccactgtatc
                                                                      780
ataacctctc aagctgacga atgcaaggtg agagcacaga acccgggata agcagataga
                                                                      840
agaaaggatg ctgtcttcac aggcaagatg acaacaacag gcattgcaac caggcaccag
                                                                     900
```

```
960
gcaccaacgg agaggcagct tcgatataag gaaaaagtgg ctgaactcaa gaagaaaaga
                                                                     1020
aattctggac tgagcaaaga acagaaagag aaatatatgg aacacagaca gacctatggg
                                                                     1080
aacacacggg aacctctttt agaaaacctg acaagcgagt atgacttgga tcttttccga
agagcacaag cccgggcttc agaggatttg gagaagttaa ggctgcaagg ccaaatcaca
                                                                     1140
gagggaagca acatgattaa aacaattgct tttggccgct atgagcttga tacctggtat
                                                                     1200
cattetecat atectgaaga atatgeaegg etgggaegte tetatatgtg tgaattetgt
                                                                     1260
                                                                     1320
ttaaaatata tgaagagcca aacgatactc cgccggcaca tggccaaatg tgtgtggaaa
                                                                     1380
cacccacctg gtgatgagat atatcgcaaa ggttcaatct ctgtgtttga agtggatggc
aagaaaaaca agatctactg ccaaaacctg tgcctgttgg ccaaactttt tctggaccac
                                                                     1440
                                                                     1500
aagacattat attatgatgt ggagcccttc ctgttctatg ttatgacaga ggcqgacaac
actggctgtc acctgattgg ataittttct aaggaaaaga attcattcct caactacaac
                                                                     1560
gtctcctgta tccttactat gcctcagtac atgagacagg gctatggcaa gatgcttatt
                                                                     1620
gatttcagtt atttgctttc caaagtcgaa gaaaaagttg gctccccaga acgtccactc
                                                                     1680
tcagatctgg ggcttataag ctatcgcagt tactggaaag aagtacttct ccgctacctg
                                                                     1740
cataattttc aaggcaaaga gatttctatc aaagaaatca gtcaggagac ggctgtgaat
                                                                     1800
cctgtggaca ttgtcagcac tctgcaagcc cttcagatgc tcaaatactg gaagggaaaa
                                                                     1860
cacctagttt taaagagaca ggacctgatt gatgagtgga tagccaaaga ggccaaaagg
                                                                     1920
tccaactcca ataaaaccat ggatcccagc tgcttaaaat ggacccctcc caagggcact
                                                                     1980
taaagtgacc tgtcattccg agccagcgaa ccccagcagt aggaatccgt accctaggga
                                                                     2040
tctgtctgtc atttctctgt tgctcttgtg attggcaagt acagtatcct ttgggaaggc
                                                                     2100
catececete aggactgtee tggeteegae etttgtgtae actgeagaeg etggttetga
                                                                     2160
ggaactgttg tttcggcctc agtgaggttg cctggatggg atctgtatta gacttgagtg
                                                                     2220
caggitetete ageactgace caaggagite tgttatggta etgtacetgt ceaqteactg
                                                                     2280
gttctctcct catgtcctct cgccccatga ggttgtgttg tgtcttctaa gcgtggtact
                                                                     2340
agtgcttgcc acctggtcac cagacctcca aatatggctg ccaccaccag gacctttcca
                                                                     2400
gttactcctt atatgtgtgt tctatggagg ggcagggaaa aggtggcact tgtgagtgtg
                                                                     2460
tgtggattgg cagggggtcc attcactttg ggttccatct tgctttaaat ttcttcattt
                                                                     2520
tgattaagag acctcttttt gatctgtatt gggctaacca gagccaaata cttttgaaga
                                                                     2580
gtttcccagg gactagtcat ggtaatagca tataattgat ctgaatgaga tggagagaag
                                                                     2640
aatgaagggg tggtggttct gggtttgatt tgagttcacc tgtgggcagt gggcagtggg
                                                                     2700
cagtgtcttg gtgaaaggga acggatacta ctttttgcct caccgtaaag tactcactag
                                                                     2760
taaatattto ottototott taotoocaot tittaogitt goaggigooa aagtaatgto
                                                                     2820
cacttttccc tttcatgctg catattaact ggttaattat actgcagaaa ccttttcacc
                                                                     2880
tecaetagte tgatacagta catetgtaet tecatataee ttgeaetgat tttgtetgag
                                                                     2940
tgccctggga gaagtagaaa atgattgaaa gtgacttccg tatctcagcc catgactcag
                                                                     3000
caaggcagaa tggccacccc tgccaaagtt tgcttctctt ttcaacagtg cctcaccctc
                                                                     3060
cctctaggat taaagtgctt ctgcccttcc acgaactcct cctccatttc ctttttggga
                                                                     3120
tttgtcacca tccttctatt ctctggtctt ctatttttgg tgttgttcaa gtgaaggaag
                                                                     3180
agatgttccc tctaatttct ctctagccca ttataacctg ctatcttggg gcaacttttg
                                                                     3240
atgtatgaca tgtcaccctt cccaacttgg tctcctccaa catgctgtct tcatgtggag
                                                                     3300
ccctcaccac aatccctgac tccggtcatt tgtgcctttc tcttgtcatc tctgtacact
                                                                     3360
acttatattc actgtgggtt gggggagcta attttaagca tgttcagtgg cagctccct
                                                                     3420
ccagtttcag tgtcactgtt aaaatttatc aaaaagcaac ttcactaggg gttttcttaa
                                                                     3480
gggataaagg ccttttacag aagctaaacc cttccccaca tgtggtagaa tgtgctcttc
                                                                     3540
tatatctact cctcaataaa gcatgttctc tg
                                                                     3572
```

```
<210> 6214
<211> 1556
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

```
<222> (1170)...(431)
<223> similar to gil397235 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6214 tttttttttc atagttcata gtttattaca aatgcatatt atccaactca gtagaaatcc 60 atgtacccca gaatgtacag aaggtatgca atgttccaga gtgtcattgt cagctctggt 120 tttatatata tattaaatat atacatattt tgagacaggg tctcgctgtc acccaggctg 180 gagtgcagtg gcacaatctc agctcactgc aacctctgcc tcccagcctc aagagatcct 240 cccacctcat ccttctgagt agctgggact acatgcgcat gccaccacac ccagctatta 300 tttttatttc tttttgtaga gacaagggct cactatgttt ctcaggctgg tcttgaactc 360 ctggtctcaa gtgatccttc tgccttggcc tcccaaagtg ctggaattat aggcatgagc 420 cactgagect ggeetgatta tetgtttttt gaatagtgae eetaatgtge ttttecagtt 480 ccagtaactt ttgataaaat ttttcagcag tgtcttcatc taggtccatc ttctgggtca 540 taatataatt tetteeaaag eeagtggtgg eacteagata titgateaga ggattgagag 600 attcaggett ttggtggaaa agecataeea gagettetgt tecattatat ggtgteaaag 660 tgaatgcatt tgcaaaaaag cgaagtagca atattgccgg catcaacagc gtccatataa 720 acggaggcag aattccatat gtcaaattgg tcaatgctgt acctggacag gccacattgg 780 aatagagacc ctgctggttg aagttcctgt tcaaagccac actcaaaagg tcagtgqcat 840 900 tagattteet tgeattgega gatgatgtee agatgagetg agatggattg teactgtgae 960 agaggagagg ctccagttcc cgaatcagga taaaatggcc aaagacatcg gtctcaaaca 1020 cctcctgaag tccatcagca gtgatcttat caccctgggt cagcaggcct tcagcttgaa 1080 aagaggccaa agagaagtgc tttgatattt agttgtggat taggcatgat cccaqcattt 1140 agatatatac agtetaatet etgaaacetg caagtaaace accaaacaag attqtqaqtt 1200 gcaagtaaaa acatcaggac aagattgtgt attctatctc tagagtgact agattcaagg 1260 aggcctaaga aagacaaaaa atacttttta aattaataaa ttagcccaca gcaagctcag 1320 aagaatttat agcccattag agttacagca tttctttctc aacagttttt ctttagctac 1380 agtaaacatt tgagaattet ttetttggta gtggetteaa acagaatetg tggagteate 1440 gtggacttta agtaaaacct ctgatcaata attccttcca gctctgtcct ctcaataagg 1500 aattgcagca accetttaac ttttaaacce ceteteetca tettacaaag tetett 1556

```
<210> 6215
<211> 2761
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (197)...(2611)
<223> similar to gi2230871 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6215
gcccgactct aacatggcgg cgccctttgt ctgctctgga gtgccgtccc cggccttctc 60
gcggccgtga tgcacctccc tctgcggtgg ggtccgggac atggcaggta atgagccgga 120
cgaggggagc caagctggag tttacacagg caaactgtca gaaaagagta gcctgggctg 180
```

```
tetggaaate tgagecatgg acttteecea geacagecag catgtettgg aacagetgaa
                                                                      240
                                                                      300
ccagcagcgg cagctggggc ttctctgtga ctgcaccttt gtggtggacg gtgttcactt
                                                                      360
taaggeteat aaageagtge tggeggeetg cagegagtae tteaagatge tettegtgga
                                                                      420
ccagaaggac gtggtgcacc tggacatcag taacgcggca ggcctggggc aggtgctgga
                                                                      480
gtttatgtac acggccaagc tgagcctgag ccctgagaac gtggatgatg tgctgcgccg
                                                                      540
tggccacttt cctccaaatg caggacatca tcacggcctg ccatgccctc aagtcacttg
                                                                      600
ctgagccggc taccagccct gggggaaatg cggaggcctt ggccacagaa ggaggggaca
                                                                      660
agagagccaa agaggagaag gtggccacca gcacgctgag caggctggag caggcaggac
                                                                      720
gcagcacacc cataggcccc agcagggacc tcaaggagga gcgcggggt caggcccaga
                                                                      780
gtgcggccag cggtgcagag cagacagaga aagccgatgc gccccgggag ccgccgcctg
tggagctcaa gccagacccc acgagtggca tggctgccgc agaagctgag gccgctttgt
                                                                      840
                                                                      900
ccgagagctc ggagcaagaa atggaggtgg agcccgcccg gaaaggggaa gaggagcaaa
                                                                      960
aggagcaaga ggagcaagag gaggagggcg cagggccagc tgaggtcaag gaggagggtt
                                                                     1020
cccagctgga gaacggagag gcccccgagg agaacgagaa tgaggagtca gcgggcacag
                                                                     1080
acteggggea ggagetegge teegaggeee ggggeetgeg eteaggeace taeggegace
gcacggagtc caaggcctac ggctccgtca tccacaagtg cgaggactgt gggaaggagt
                                                                     1140
tcacgcacac ggggaacttc aagcggcaca tccgcatcca cacgggggag aagcccttct
                                                                     1200
cgtgccggga gtgcagcaag gccttttccg acccggccgc gtgcaaggcc catgagaaga
                                                                     1260
cgcacagccc tctgaagccc tacggctgcg aggagtgcgg gaagagctac cgcctcatca
                                                                     1320
gcctgctgaa cctgcgcaag aagcggcact cgggcgaggc gcgctaccgc tgcgaggact
                                                                     1380
geggeaaget etteaceace tegggeaace teaagegeea ceagetggtg cacageggeg
                                                                     1440
                                                                     1500
agaagcccta ccagtgcgac tactgcggcc gctccttctc cgaccccact tccaagatgc
gccacctgga gacccacgac acggacaagg agcacaagtg cccacactgc gacaagaagt
                                                                     1560
tcaaccaggt agggaacctg aaggcccacc tgaagatcca catcgctgac gggcccctca
                                                                     1620
                                                                     1680
agtgccgaga gtgtgggaag cagttcacca cctcagggaa cctgaagcgg caccttcgga
tccacagegg ggagaagccc tacgtgtgca tccactgcca gcgacagttt gcagaccccg
                                                                     1740
gegetetgea geggeaegte egeatteaea eaggtgagaa geeatgeeag tgtgtgatgt
                                                                     1800
geggtaaggc cttcacccag gccagctccc tcatcgccca cgtgcgccag cacaccgggg
                                                                     1860
agaagcccta cgtctgcgag cgctgcggca agagattcgt ccagtccagc cagttggcca
                                                                     1920
atcatattcg ccaccacgac aacatccgcc cacacaagtg cagcgtgtgc agcaaggcct
                                                                     1980
tcgtgaacgt gggggacctg tccaagcaca tcatcattca cactggagag aagccttacc
                                                                     2040
tgtgtgataa gtgtgggcgt ggcttcaacc gggtagacaa cctgcgctcc cacgtgaaga
                                                                     2100
ccgtgcacca gggcaaggca ggcatcaaga tcctggagcc cgaggagggc agtgaggtca
                                                                     2160
gegtggtcac tgtggatgac atggtcacgc tggctaccga ggcactggca gcgacagccg
                                                                     2220
teacteaget cacagtggtg ceggtgggag etgeagtgac ageegatgag aeggaagtee
                                                                     2280
tgaaggccga gatcagcaaa gctgtgaagc aagtgcagga agaagacccc aacactcaca
                                                                     2340
tcctctacgc ctgtgactcc tgtggggaca agtttctgga tgccaacagc ctggctcagc
                                                                     2400
atgtgcgaat ccacacagcc caggcactgg tcatgttcca gacagacgcg gacttctatc
                                                                     2460
agcagtatgg gccaggtggc acgtggcctg ccgggcaggt gctgcaggct ggggagctgg
                                                                     2520
tetteegece tegegaeggg getgagggee agecegeaet ggeagagaee teecetaeag
                                                                     2580
ctcctgaatg tcccccgcct gccgagtgag ctggcggccc ttctgactgt ttatttaagg
                                                                     2640
atggatggca ccctggaacc gggaagggtg gcctgttccc tagagagaat aaattggatt
                                                                     2700
attttttaaa aaaaaaaacc tcgtgccaag cttggggtaa tgagtgtaat cagctttcga
                                                                     2760
                                                                     2761
```

```
<210> 6216
<211> 1806
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (53)...(1202)
```

<223> similar to gi2505957 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 6216
ggccaagttc cgccatgctc agggcactgt cctgtaccga gacagccaca tcaccaacct
                                                                     60
caaggggetg aacetcacca cacetggtga gagtgaegge ttetgtgeca acaagetgeg
                                                                    120
tgtggccgtg ccgctgctca gcagcggggg acaggtggct gtgcttgagc tacggaagcc
                                                                    180
tggccgcctg cccgacacgg cactgcccac gctgcagaat ggggcagctg tgactgatct
                                                                    240
ggcctgggac ccctttgacc cccatcgcct cgctgtggct ggtgaggacg ccaggatccg
                                                                    300
actgtggcgg gtacccgcag agggcctgga agaggtgctc accacgccag agactgtgct
                                                                    360
cacaggecae aeggagaaga tetgeteeet gegetteeae ceaetggeag eeaatgtget
                                                                    420
ggcctcgtcc tcctatgacc tcactgttcg catctgggac cttcaqqctq qaqctqatcq
                                                                    480
getgaagetg cagggecace aagaccagat etteageetg geetggagte etgatgggea
                                                                    540
gcagctggcc actgtctgca aggatgggcg tgtgcgggtc tacaggcccc ggagtggccc
                                                                    600
tgagcccctg caggaaggcc cagggcccaa gggaggacgc ggagctcgca ttgtctqqgt
                                                                    660
atgtgatggt cgctgtctgc tggtgtctgg ctttgacagc caaagtgagc gccagctgct
                                                                    720
cctatatgaa gctgaggccc tggccggcgg acccttggca gtgttgggcc tggacgtggc
                                                                    780
teceteaace etgetgeeca getacgaece agacaetgge etggtgetee tgaceggeaa
                                                                    840
gggcgacacc cgtgtattcc tgtacgagct gctccccgag tcccctttct tcctggagtg
                                                                    900
caacagette acgtegeetg acceccacaa gggeetegte etectgeeta aqacqqaqtq
                                                                    960
cgacgtgcgg gaagtggagc tgatgcggtg cctgcggctg cgtcaqtcct ccctqqaqcc
                                                                   1020
tgtggccttc cggctgcccc gagtccggaa agagttcttc caggatgacg tgttcccaga
                                                                   1080
cacggetgtg atetgggage etgtgeteag tgeegaggee tggetgeaag gegetaatgg
                                                                   1140
gcagccctgg cttctcagcc tgcagcctcc tgacatgagc ccaggtgcac cgagggactg
                                                                   1200
ggtgtgggga ggaagcggga tgggggttgg agaaagggac agaaggccca ggttgaagtt
                                                                   1260
ccattcctgt tggcacgcag aatcctctgg cctttgggag ggtggagtgg ctgtgtcaat
                                                                   1320
cagtetetga gecagtggag ggeagggete gtggtetgtg tttteateac aggteeceac
                                                                   1380
ccctaacaca cacacacg cacacactgt ggtgtctagg gcagggctta tacagtgagg
                                                                   1440
ctccattgac tgttaatacc acctcttaga tctgcgccat agaaatcccc tatgtcggcc
                                                                   1500
aggcgcggtg gctcatgcct gtaatcccag cactttatga ggctgaggcg agtggatcac
                                                                   1560
ctgaggtcgg gggtttgaga ccagcctggc caacatggtg aaaccccatc tctactaaaa
                                                                   1620
atacaaaatt agcctggcgt ggtgggcgcc tgcaatccca actactccag aggctgaagc
                                                                   1680
aggagaatcg cttgaaccca gaggaggcgg aggttgcagt cagcctaggt cacatcattg
                                                                   1740
1800
tttaac
                                                                   1806
```

```
<210> 6217
<211> 3023
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (71)...(1928)
<223> similar to gi5596702 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6217 gcgggtgaac gacgcttcgt gcggcccgtc tggctgctac acataccagg tgagcagaca 60 cagcacggag atgctgcaca acctgaacca gcagcgcaaa aacggcgggc gcttctgcga 120 cgtgctcttg cgggtaggcg acgagagctt cccagcgcac cgcgcagatg ctggccgcct 180 gcagcgagta ctttgagtcg gtgttcagcg cccagttggg cgacggcgga gctgcggacg 240 ggggtccggc tgatgtaggg ggcgcgacgg cagcaccagg cggcggggcc gggggcagcc 300 gggagctgga gatgcacact atcagctcca aggtatttgg ggacattctg gacttcgcct 360 acacttcccg catcgtggtg cgcttggaga gctttcccga actcatgacg gccgccaagt 420 tectgetgat gaggteggtt ategagatet gecaggaagt cateaaacag tecaaegtae 480 agatectggt acceectgee egegeegata taatgetett tegeeeceet gggaeetegg 540 acttgggctt ccctttggac atgaccaacg gggcagcctt ggcagccaac agcaatggca 600 tegeeggeag catgeageea gaggaggagg cageteggge ggetggtgea gecattgeag 660 gccaagcctc tttgcctgtg ttacctgggg tggaccgctt gcccatggtg gctggacccc 720 tatecececa actgetgaet tececattee ecagtgtgge atecagtgee ectecectga 780 ctggcaagcg aggccggggc cgcccaagga aggccaacct gctggactca atgtttgggt 840 ccccaggggg cctgagggag gcaggcatcc ttccatgcgg tctatgtggt aaggtgttca 900 ctgatgccaa ccggctccgg cagcacgagg cccagcacgg tgtcaccagc ctccagctgg 960 getacatega cetteeteet eegaggetgg gtgagaatgg getacecate tetgaagace 1020 ccgacggccc ccgaaagagg agccggacca ggaagcaggt ggcttgtgag atctgcggca 1080 agatetteeg tgatgtgtat catettaace ggeacaaget gteecactet ggggagaage 1140 cctactcctg ccctgtgtgt gggttgcggt tcaagagaaa aagaccgcat gttccttacc 1200 atgttgcggt cccatgatgg ggtccgtggg caagccttac atctgccaga gctgtgggga 1260 aaggettete eaggeetgat eacttgaaeg gacatateaa geaggtgeae aettetgage 1320 ggcctcacaa gtgtcagacc tgcaatgctt cttttgccac ccgagaccgt ctgcgctccc 1380 acctggcctg tcatgaagac aaggtgccct gccaggtgtg tgggaagtac ttgcgggcag 1440 catacatggc agaccacctg aagaagcaca gcgaggggcc cagcaacttc tgcagtatct 1500 gtaaccgaga aggccagaaa tgctcacatc aggatccgat tgagagctct gactcctatg 1560 gtgacctete agatgecage gacetgaaga egecagagaa geagagtgee aatggetett 1620 tctcctgcga catggcagtc cccaaaaaca aaatggagtc tgatggggag aagaagtacc 1680 catgccctga atgtgggagc ttcttccgct ctaagtccta cttgaacaaa cacatccaga 1740 aggtgcatgt ccgggctctc gggggccccc tgggggacct gggccctgcc cttggctcac 1800 ctttctctcc tcagcagaac atgtctctcc tcgagtcctt tgggtttcag attgttcagt 1860 eggeattige gieatettia giagateetg aggitgaeea geageeeatg gggeetgaag 1920 ggaaatgagg cagctgctgt gtccccacgg aaacaaccat ctggggactg ctgggaaatg 1980 ctgtgaatgc ggagggaagt gatgtttggg ttctgtagct gagagatttt tattcatttt 2040 taactgcccc ccaaccccac tccaactcct tctccaccac ccattctccc aatggtcttt 2100 agaaatagat tttcatctga tattctgcag aaatatcaat gagacttggt atgggacagg 2160 ggcagaaaac actacatagg cctccaaggc aaaaaccagt tcccagtttc tttaaatggg 2220 gaagaagctg gaattcctgg tgctcaattc ttagtgaccc caatcctata cccaaatcta 2280 tgatattctg ggacctcagt gattttggtc ccctcccact tctctagttc gtcatcctcc 2340 cttcccatat ccttcaaaag aaccacacta gggtctccac ctacttatac aatgcggatg 2400 cccaactgtt tttaaggaag ccagaagcat cccatggacc atggggtgag tgtcctccaa 2460 gagccccctg agctcagccc tctgcctgga gggctccaga cctttctgag ccctgcttgg 2520 aggcgagcat tttcactgct aggacaagct cagctgttga ggacaccccc accccaaatt 2580 tcagttctta cgtgatttta accattcaac atgctgttgg gttttaattc tctaattatt 2640 attattattg gtattatttt ttaggaccag ttgtagtgaa ttgctactga aagctatccc 2700 aggtgataca gagctctttg taaaccgcag tcacacatta gggttagtat taaactttgt 2760 ttagatgtac cataattaac ttggctagtt gattgtttga agtctatgga agaaatagtt 2820 ttatgcaaaa ttttaaaaaa tgccagtctg gtcagggaag tagggggttt caatgctgtt 2880 gggaaccagg aaggtgggac agccggcagg tagggacatt gtgtacctca gttgtgtcac 2940 atgtgagcaa gcccaggttg accttgtgat gtgaattgat ctgatcagac tgtattaaaa 3000 atgttagtac attaaaaaaa aaa 3023

```
<210> 6218
<211> 1572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1187)...(777)
<223> similar to gi5531821 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6218 tttttttttt ttacatcaaa atgtctttta tttgagacac aaaaatgcaa aattgctgag 60 atatcaaaca tttcccgatc agctacaata ctgccactat gtacaaaaga tctgatgata 120 aatgtgcaca catataaaaa tacagtatgc attacttatg tacagtacat gtgcaaaatg 180 tatqqcattc aaacatgata tqqaattgat ttcaggggtg caaacagcaa atacaaaggc 240 300 atcatggttt ttcttttaaa aaacaacata aaggcaatag atgaatggac ccccgattgc cataattttt tgttgattaa actagtgctt caacaagcag ggctctgtag attggtatct 360 ttctcctttt tttcataaag tgagatgcta agacataatg tgacaatgaa aataagaaga 420 qaaacaccta tcacattgca tttctattgc aagcaagaaa agaaaactaa tttctacata 480 gaaaaaaaac tttgtattac tactgaatgt tactcttaaa ccaacaaaac aactctatac 540 tattttacat gaaaacaata agagaaatat ctacatctta gtgaaaatta taaccttaaa 600 tggataatac ctttttgggg ctgatttttg agatctcatt agtctcaaat tttaaataaa 660 aagtgcctcc ttttggcaaa tacttggcaa tgcctttggt tcctttaaag caagtttgca 720 ttactattgg ttacttgagg tcaagtactt ttggtagata ctaaaccctt tcctaaatgc 780 ttcctcttcc taccaaatta gcaagattcc ttacagcatc acgtagagag gtaattgtta 840 cgagtttcag tattctataa actttgttaa agctttgtct tagtagttgg cataaagctc 900 tgttaaacac tatagatgtg atgatatctc tgataacata ttttatttga ttcccgacag 960 caccttgtag atccgagatt gccatcttat tgtcacaaag ctgtgacacc acagagcaaa 1020 gtgtttgcat ggagggtaag agctcttctg taaacatgtg cagcttttcg aattgtaggc 1080 cttccatgaa agatttcagg tagaaaccct ttgtaatgat gtgtttccct ggatactgca 1140 agaaagggcg aatgtggaaa aaacacgcac ctgctcattg ccatgcagac agagtcactt 1200 tacaaataaa aatgtagctc agagagactg ctgaatgagc aagttattga aggtttgaac 1260 caggaaaaaa aaattactac atcttagttg ttttccagtt ttgactgaaa tcacttaaaa 1320 gatgagttga aatgcagtta ggatgctctc cagatacaca ctgatgcatt tgtaagctat 1380 qttccttqaa aaacctqacc ttccaqttaa tqttctttqa taattttqqq ctaattctqt 1440 ggcctctagg gcggtgggac gatttgtatg ggtattctct tgtcagtatt caatattcat 1500 gtttacagta gcagatattg aaaaatggag ggttatttgt gaatttggtt aaattgacac 1560 atgttgctct gc 1572

```
<210> 6219
<211> 5006
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (296)...(4701)
<223> similar to gi3043714 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6219 ttttggcccc ggtccggact ctggcggggg agcccgcggc agtggttggg gaagtcqaaq 60 ccaagcgccg tatgggactt tgggcgctgt gagcggcggc gagcaggtgc tgctgcatga 120 ggaggcgggt gattctggct ttgtcagtct ctctcggctg ggcccatctc tgagggacaa 180 ggacctggaa atggaggagc taatgctgca ggatgagaca ctgctgggga ccatgcagag 240 ctacatggat gcctccctta tctccctcat tgaggatttt gggagccttg gagaggttga 300 aatgtetett ecagateeet ettgggaett etceccacee tetttettag agacetette 360 ccccaagett cctagetgga gacccccaag atcaagacca cgetggggcc aatccccacc 420 tececageag egeagtgatg gagaagaaga ggaggaggtg geeagettea gtggeeagat 480 tettgeeggg gagettgaca actgtgtgag cagtateeeg gaetteeeca tgeatttgge 540 ctgccctgag gaggaagata aagcaacagc agcagagatg gcagtgccag cagctggtga 600 tgagagcate tectecetga gtgagetggt gegggeeatg caeceataet geetgeecaa 660 cctcacccac ctggcatcac ttgaggatga gcttcaggag cagccagatg atttgacact 720 gcctgagggc tgcgtagtgc tggagattgt ggggcaggca gccacagctg gcgatgacct 780 ggagatecca gttgtggtgc gacaggtete teetggaeee eggeetgtge teetggatga 840 ctcgctagag actagttctg ccttgcagct gcttatgcct acactggagt cagagacaga 900 ggctgctgtg cccaaggtaa ccctctgctc tgagaaagag gggttgtcat tgaactcaga 960 ggagaagetg gaeteageet gettattgaa geeeagggag gtegtggage eggtggtgee 1020 caaggageet cagaaceeac etgecaatge ageaceaggt teecagagag etegaaaggg 1080 caggaagaag aagagcaagg agcagccagc agcctgtgtg gaaggctatg ccaggaggct 1140 gaggtcatct tctcgcgggc agtctactgt aggtacagaa gtgacctctc aqqtaqacaa 1200 cttgcagaaa cagcctcagg aagaacttca aaaagagtct gggcctctcc agggtaaggg 1260 gaagccccgg gcttgggctc gggcctgggc agctgccttg gagaattcta gccctaagaa 1320 cttggagaga agtgctggac aaagtagtcc tgctaaagaa ggccctctag acctctaccc 1380 aaagctggct gacactatcc aaaccaatcc tataccaacc catctctcat tggtcgactc 1440 tgcccaagcc agccccatgc cagttgactc tgttgaagct gatcccactg cagttggccc 1500 tgttctagct ggccctgtac ctgttgaccc tgggttggtt gaccttgctt caaccaqctc 1560 agaactggtt gagcetetee eggetgagee agtgetgate aacceagtee tggetgaete 1620 agcagcagtt gaccetgcag tggttcccat ctcagataac ttgccaccag ttgatgctgt 1680 cccgtctggc ccagcgccag ttgatctagc actggttgac cctgttccta atgacctgac 1740 tccagttgac ccagtgctag ttaagtccag accaactgat cccagacgtg gtgcagtgtc 1800 atcagecetg gggggtteag caceceaget cetegtggag teagagteet tggacecace 1860 aaagaccatc atccctgaag tcaaagaggt tgtggattct ctgaaaaattg aaagtggtac 1920 cagtgctaca acccatgaag ccagacctcg gcctctcagc ttatctgagt accggcgacg 1980 aaggcagcaa cgccaagcag aaacagaaga gagaagtcca cagcccccaa ctgggaagtg 2040 gcctagcctt ccagagactc ccacagggct ggcagacatc ccttgtcttg tcatcccacc 2100 agccccagcc aagaagacag ctctgcagag aagccctgaa acaccccttg agatttgcct 2160 tgtgcctgta ggtcccagcc ctgcttctcc tagtcctgag ccacctgtaa gcaaacctgt 2220 ggcctcatct cccactgagc aggtgccatc ccaggagatg ccactgttgg cgagaccttc 2280 ccctcctgtg cagtctgtgt cccctgctgt gcccacacct ccctcgatgt ctgctgccct 2340 geettteeet geaggtggge ttggeatgee ceccagtetg cecccacete cettgeagee 2400 tectagtett ceattgteta tggggecagt actacetgat cegtttacte actatgecee 2460 cttgccatcc tggccttgtt atcctcatgt gtccccttct ggctatcctt gcctgcccc 2520 cccaccaacg gtgcccctag tgtctggtac tcctggtgcc tatgccgtgc ctcccacttg 2580 cagtgtgcct tgggcacccc ctcctgcccc agtctcacct tacagttcca catgtaccta 2640 tgggcccttg ggatggggcc cagggcctca acatgctcca ttctggtcta ctgttccccc 2700 acctectttg cetecageet ceattgggag agetgtteec caacctaaaa tggagtetag 2760 gggcactcca gctggccctc ctgaaaatgt acttcccttg tcgatggctc ctcccctcag 2820 tettgggeta eetggeeatg gageteetea gacagageet accaaggtgg aggteaagee 2880 agtgcctgca tctccccatc cgaaacacaa ggtgtctgcc ctggtgcaaa gtccccagat 2940 gaaggeteta geatgtgtgt etgetgaagg tgtgaetgtt gaggageetg cateagagag 3000 gctaaagcct gagacccaag agaccaggcc cagggagaag cccccttgc ctgctaccaa

ggctgttccc acaccaaggc agagcactgt ccccaagctg cctgctgtcc acccagccg

3060

3120

```
tctaaggaag ctgtccttcc tgcctacccc acgtactcag ggttctgaag atgtggtaca
                                                                     3180
ggctttcatc agtgagattg gaattgaggc atcggacctg tccagtctgc tggagcagtt
                                                                     3240
tgagaaatca gaagccaaaa aggagtgtcc tcctccggct cctgctgaca gcttggctgt
                                                                     3300
aggaaactca ggcggcgttg acattcccca ggagaagagg cccctagacc ggttacaagc
                                                                     3360
cccagaactg gccaacgtgg cagggctcac ccctccagct acccctcccc accagttatg
                                                                     3420
gaagcccctg gctgctgtct cactgctggc caaagccaaa tctcctaagt ccaccgccca
                                                                     3480
ggagggaacc ctgaagcctg aaggagttac ggaggccaaa catccagctg cagttcgcct
                                                                     3540
ccaagaaggg gtccatggcc ctagtcgagt ccatgtgggc tctggggacc atgactattg
                                                                     3600
tggtccggag caggaccccc cccaaaaaag atgcctgccc tactcattcc agaggtgggc
                                                                     3660
tecegatgga atgteaageg ecateaggae ateaceatea aacetgtett gteettggge
                                                                     3720
ccagetgeec etecgeece atgeataget geeteeggg ageegettga teacaggaet
                                                                     3780
ageagtgage aggeagatee eteageacee tgeettgeee cateeagett getgteeeet
                                                                     3840
gaggeeteae cetgeeggaa tgacatgaac actaggaete cecetgaace etcagecaag
                                                                     3900
cagcggtcaa tgcgctgtta ccgaaaagcc tgcaggtcag ccagcccctc aagccagggc
                                                                     3960
tggcagggcc gccgaggccg caacagccgt tctgtcagct ctgggtccaa ccggactagc
                                                                     4020
gaagcatett ceteateete ateategtet teeteateee gateteggte caggteeete
                                                                     4080
tecececcae acaagaggtg gegaaggtee agetgtagtt cetetggaeg ttetegaaga
                                                                     4140
tgctcttcct cttcttcgtc atcatcttcc tcttcgtctt cctcatcctc atcatccagt
                                                                     4200
tetegaagee geteaegate eccateeece egeeggagaa gtgacaggag geggeggtae
                                                                     4260
agetettate gtteacatga ecattaceaa aggeaaagag tgetacaaaa ggagegtgea
                                                                     4320
atagaagaaa gaagggtggt cttcattgga aagatacctg gccgcatgac tcgatcagag
                                                                     4380
ctgaaacaga ggttctccgt ttttggagag attgaggagt gcaccatcca cttccgtqtc
                                                                     4440
caaggggaca actacggctt cgtcacttat cgctatgctg aggaggcatt tgcagccatt
                                                                     4500
gagagtggcc acaagctgcg gcaggcagat gagcagccct ttgatctctg ctttgggggc
                                                                     4560
cgaaggcagt tctgcaagag gagctattct gatcttgact ccaaccggga agactttgac
                                                                     4620
ccagcacctg taaagagcaa atttgattct cttgactttg acacattgtt gaaacaggcc
                                                                     4680
cagaagaacc tcaggaggta accttgggcc cttccctgct atcctttttc tcctttggag
                                                                     4740
gtgcccaacc tectecacce cettececta etetagggga gagagetget agtgagatga
                                                                     4800
ctgttttata aagaaatgga aaaaagtgaa ataaaaaata tgttgaatca gattttttta
                                                                     4860
aaaggggtat ttggtttttt tataaacagg tattgaaaca agttaacttg cattcctatg
                                                                     4920
taagatagga ggggctgagg ggatccccag tgtttggaac ataagtcact atgcagacta
                                                                     4980
ataaacatca actagagaga actcca
                                                                     5006
```

```
<210> 6220
<211> 1169
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (97)...(1106)
<223> similar to gi5870328 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6220
gtccagtgtg gtggaattcc gtcgtctcta tggtggcggc ggatttggag ggaccctacg 60
aaccaggagt caggcgagcc gatctgggc tgcaggatgt tccgctggga gcgctccatt 120
cccctgcgag gctcggccgc cgcctgtgc aacaacctca gtgtgctgca gctgccggct 180
cgcaacctca cgtattttgg cgtggttcat ggaccaagcg cccagcttct cagcgctgct 240
cctgagggtg tgcccttggc ccagccag ctccacgcta aggagggtgc tggagtgagt 300
```

```
cccccactta tcactcaggt ccactggtgt gtcctcccct tccgagtgct gctggtactc
                                                                      360
acctcacatc gaggaataca gatgtacgag tccaatggct acaccatggt ctactggcat
                                                                      420
gcactggact ctggagatgc ctccccagta caggctgtgt ttgcccgggg aattgctgcc
                                                                      480
                                                                      540
agtggccact tcatctgtgt gggaacgtgg tcaggccggg tgctggtgtt tgacatccca
                                                                      600
gcaaagggtc ccaacattgt actgagcgag gagctggctg ggcaccagat gccaatcaca
                                                                      660
gacattgcca ccgagcctgc ccagggacag gattgtgtgg ctgacatggt gacggcagat
                                                                      720
gactcagget tgctgtgtgt ctggcggtca gggccagaat tcacattatt gacccgcatt
ccaggatttg gagttccgtg cccctctgtg cagctgtggc aggggatcat agcagcaggc
                                                                      780
tatgggaacg gacaagtgca tctatatgag gccactacag gaaatctaca tgtccagatc
                                                                      840
                                                                      900
aatgeecatg ceegggeeat etgegeeetg gaeetggett etgaggtggg caagetaete
tctgcaggtg aggacacctt tgtgcatatc tggaagctga gcagaaaccc agagagtggg
                                                                      960
                                                                     1020
ctacattgag gtggaacact gtcatgggtg agtgtgtcgc cgacacccag ctgtgtggtg
                                                                     1080
ctegattttg tgatttccca aggcaactcc ttttgctggt gactggctat gaccttgcgg
agateeggag atteaceagt gtgtgaaaag ageageette etttgteeet gtggtattea
                                                                     1140
taaagtaccc gctccccca aaaaaaaa
                                                                     1169
```

```
<210> 6221
<211> 1627
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1628)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (939)...(789)
<223> similar to gi1786168 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6221
atttgagacc tttctgagac catagtcagt gtggtggaat tcggcatttt gtcgtgggca
                                                                       60
ggggctcagc tgtcggttcc atagaggacc ttccagataa ggaggcccct ccagcccctg
                                                                      120
actgccgagc ttgatttcca ggaagggttg tggaagtcac cgagtgccct ccatgcacct
                                                                      180
gtgaagagtg cccagtgggg ccctccctgg agtggagagg agtgactccc cgtggccagc
                                                                      240
agecttgeet teetggggea cacecegeat acagettete eeegggetgg gacagtggaa
                                                                      300
gggctgcctt gccatcacct ccctgcgcac ttgctttgcc caggtcctgg ggctctgctc
                                                                      360
ctgccagctc ctgggtggtt catgctcctg tgagggcact gaccagccaa gcaggaggcc
                                                                      420
tttgtggtgg ctgagtagag gcatgtgggg tcactcatgc gccctcgggg tccaggccc
                                                                      480
actagtecte etceaagtee cattttgget ggtnggacae ceaggtgtgt ggeetagagg
                                                                      540
ctatcaggct gcagcttggg gaagcaaaca agggagggtg atggttcctg gccccacacc
                                                                      600
                                                                      660
atcattetgg tgteageeet gagagggtge etgteacage aggttecagg aetgetgeet
cctgaggatg gagaaactgt ggcaccctgg gggccactaa gggaggccag ctgattgcag
                                                                      720
ccacgtgtac cttcctcttc tcgtctctgt gttttgtaga tgaccgcacc tcgagcagga
                                                                      780
gtggggatge cacgtetgee eccagegeee ggeeetetgt ecaecaeggt catteeegga
                                                                      840
gccgccccga ccctgtccgt gcccacacca gatggcgccc tcggaaccgc ccggagaaac
                                                                      900
caggtgtggt ttggcctccg agtcccccc accgcctgct gtgggcacag cactcagccg
                                                                      960
cgagggggac agcgggtggg cagcaagact gcttcctttg cggcttcaga ccctgttcgc
                                                                     1020
```

```
tectaggtte etgtggteca egegeegtet ceacacecae ttectataet tgagttgatg
                                                                     1080
gttagaacct tgtcgtcacc ctgcagaagt acagtgcctt gaatgccagc ttttccgttc
                                                                     1140
cctgatgaaa agatatgtta aaaaaaatta tcggaaaagg tttcatttgc aattggcttg
                                                                     1200
tgcattgata atctttattt actgttttaa gttgcagaga tgtgaatggt ttacaaatct
                                                                     1260
gaagetgaag tteaatettt ggttttetgt tgtaaatgee ttttacaaae attgaattag
                                                                     1320
ctaccttaag tattgaagag cttccattgc taggtgagcc ctgctttgtc ctcagtagag
                                                                     1380
tgccggttcc ctgggctcat ccaggggctg agagacggcg ggacgctggg gcagggcaca
                                                                     1440
ctggcggagc tgcttgctca gtagggaatg tcagttgttg cgctgggcca tgagaaatcc
                                                                     1500
gccagaaaac gttaggtgag cagacatgcc ccccatgcca gtgggctgct gtgagtgagg
                                                                     1560
ataaagtgtg tgttgggcat agaaaccctg gctgcccgcc caccctgtgg agacaagtgc
                                                                     1620
agctcct
                                                                     1627
```

```
<210> 6222
<211> 859
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (148)...(794)
<223> similar to gi4929242 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6222
gtegactgac gtetgacaga gegtecacce gtettegaca ggactetatg gttettacge
                                                                       60
gegeagacag acegeetata taageeatge geaggeggag gagegeetet tteeettegg
                                                                      120
tgtgccactg aagatcctgg tgtcgccatg ggccgccgcc ccgcccgttg ttaccggtat
                                                                      180
tgtaagaaca agccgtaccc aaagtctcgc ttctgccgag gtgtccctga tgccaagatt
                                                                      240
cgcatttttg acctggggcg gaaaaaggca aaagtggatg agtttccgct ttgtggccac
                                                                      300
atggtgtcag atgaatatga gcagctgtcc tctgaagccc tggaggctgc ccgaatttgt
                                                                      360
gccaataagt acatggtaaa aagttgtggc aaagatggct tccatatccg ggtgcggctc
                                                                      420
caccccttcc acgtcatccg catcaacaag atgttgtcct gtgctggggc tgacaggctc
                                                                      480
caaacaggca tgcgaggtgc ctttggaaag ccccagggca ctgtggccag ggttcacatt
                                                                      540
ggccaagtta tcatgtccat ccgcaccaag ctgcagaaca aggagcatgt gattgaggcc
                                                                      600
ctgcgcaggg ccaagttcaa gtttcctggg ccgcccagaa gatccacatc ttcaaagaag
                                                                      660
tggggcttca ccaagttcaa tgctgatgaa tttgaagaca tggtggctga aaagcggctc
                                                                      720
atcccagatg gctgtggggt caagtacatc cccaatcgtg gccctctgga caagtggcgg
                                                                      780
gccctgcact catgagggct tccaatgtgc tgcccaccct cttaatactc accaataaat
                                                                      840
tctacttcct gtccaccta
                                                                      859
```

```
<210> 6223
<211> 4075
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (82)...(3172)
<223> similar to gi1926311 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6223 agaaactccg ggaattactg gggcgacgac ttcgtgcgct accgagcgta ggccctgcgc 60 agcgacgggg cttgggtgac catggagagc gcgctcaccg cccgtgaccg ggtgggggtg 120 caggatttcg tgctgctgga gaacttcacc agcgaggccg ccttcatcga gaacctgcgg 180 eggegattte gggagaatet catetacace tacattggce cegteetggt etetgteaat 240 ccctaccggg acctgcagat ctacagccgg cagcatatgg agcgttaccg tggcgtcagc 300 ttctatgaag agcccctca cctgcttgcc gtggcggaca ctgtgtaccg agcactgcgc 360 acggagcgtc gggaccaggc tgtgatgatc tctgtggaga gcggggcagg caagaccgac 420 gccaccaaga ggctgctgca gctctatgca gagacctgcc cagcccccca acgcggaggt 480 gccgtgcggg accggctgct acagagcaac ccggtgctgg aggcctttgg aaatgccaag 540 acceteegga aegataacte cageaggtte gggaagtaca tggatgtgea gtttgaette 600 aagggtgccc ccgtgggtgg ccacatcctc agttacctcc tggaaaagtc acgagtggtg 660 caccagaatc atggggagcg gaacttccac atcttctacc agctgctgga gggggggag 720 gaagaaactc ttcgcaggct gggcttggaa cggaaccccc agagctacct gtacctggtg 780 aagggccagt gtgccaaagt ctcctccatc aacgacaaga gtgactggaa ggtcgtcagg 840 aaggetetga eagteattga tttcacegag gatgaagtgg aggacetget gageategeg 900 gccagcgtcc ttcatttggg caacatccac tttgctgcca acgaggagag caatgcccag 960 gtcaccaccg agaaccagct caagtatctg accaggctcc tcagcgtgga aggctcgacg 1020 etgegagaag ceetgacaca caggaagate ategecaagg gggaggaget cetgageeeg 1080 ctgaacctgg agcaggccgc gtacgcacga gacgccctcg ccaaggctgt gtacagccgc 1140 acttttacct ggctcgtcgg gaagatcaac aggtcgctgg cctccaagga cgtggagagc 1200 cccagctggc ggagcaccac ggttctcggg ctcctggata tttatggctt tgaaqtqttt 1260 cagcataaca gctttgagca gttctgcatc aattactgca acgagaagct gcagcagctc 1320 ttcatcgagc tcacgctcaa gtcggagcag gaggagtacg aggcagaggg catcgcgtgg 1380 gagcccgtcc agtatttcaa caacaaaatc atctgtgatc tggtggagga gaagtttaag 1440 ggcatcattc tcgattttgg atgaaggagt gtctgcgccc gggggaggcc acagacctga 1500 cetteetgga gaagetggag gatactgtea ageaceatee acaetteetg acgeacaage 1560 tggctgacca gaggaccagg aaatctctgg gccgagggga attccgcctt ctgcactatg 1620 cgggggaggt gacctacagc gtgaccgggt ttctggacaa aaacaatgac cttctcttcc 1680 ggaaccttaa ggagaccatg tgtagctcaa agaatcccat tatgagccag tgcttcgacc 1740 ggagcgagct cagtgacaag aagcggccag agacggtcgc cacccagttc aagatgagcc 1800 tectgeaget ggtggagate etgeagteta aggageeege etacgteege tgeateaaac 1860 ccaatgatgc caaacagccc ggccgctttg acgaggtgct gatccgccac caggtgaagt 1920 acctggggct gttggaaaac ctgcgcgtgc gcagagccgg ctttgcctat cgccgcaaat 1980 acgaagettt eetgeaaagg tacaagteac tgtgeecaga gaegtggeec aegtgggeag 2040 gacggccgca ggatggggtg gctgtgctgg tccgacacct gggctacaag ccagaagagt 2100 acaagatggg caggaccaag atcttcatcc gcttccccaa gaccctgttt gccacagagg 2160 atgccctgga ggtccggcgg cagagcctgg ccacaaagat ccaagctgcc tggaggggct 2220 ttcactggcg gcagaaattc ctccgggtga agagatcagc catctgcatc cagtcgtggt 2280 ggcgtggaac actgggccgg aggaaggcag ccaagaggaa gtgggcggca cagaccatcc 2340 ggcggctcat ccgaggcttc gtcctgcgcc acgccccccg ctgccccgag aacgccttct 2400 tcctggacca tgtgcgcacc tcttttttgc taaacctgag gcggcagctg ccccagaatg 2460 tectggacae etegtggece aegececeae etgecetgeg tgaggeetea gagettetge 2520 gggagttgtg cataaagaac atggtgtgga aatactgccg gagtatcagc cctgagtgga 2580 agcagcaget gcagcagaag gccgtggcta gtgagatctt caagggcaag aaggataatt 2640 acceteagag tgtacecagg etetteatea geactegget tggtacagat gagateagee 2700 cccgagtgct gcaggccttg ggctctgagc ccattcagta tgcggtgcct gttgtgaaat 2760 acgaccgcaa gggctacaag cctcgctccc ggcagctgct gctcacgccc aacgccgtcg 2820 tcatcgtgga ggacgccaaa gtcaagcaga ggattgatta cgccaacctg accggaatct 2880

```
ctgtcagcag cctgagcgac agtctttttg tgcttcatgt acagcgtgcg gacaataagc
                                                                 2940
aaaagggaga tgtggtgctg cagagtgacc acgtgattga gacgctgacc aagacagccc
                                                                 3000
teagtgceaa eegegtgaac agcateaaca teaaccaggg cagcateacg tttgcagggg
                                                                 3060
gccccggcag ggatggcacc attgacttca cacccggctc ggagctgctc atcaccaagg
                                                                  3120
                                                                 3180
ccaagaacgg gcacctggct gtggtcgccc cacggctgaa ttctcggtga taaaggcgcc
cactggaccc teccaaegec caatgetttg etttteteet ceteceette ecagttacca
                                                                  3240
aagactegaa ettecagaca gggacecagg gacacecega ageceacetg caateteeca
                                                                 3300
cetectgeec atcectetet tgagggagea geaggggeea ggagetacec caggagtggg
                                                                 3360
ccaggccggg ccacagcaat aggaaagcca gggccagagc gagccatgcc agccctactg
                                                                  3420
cegatgecaa atatttgaga gaagggaact tttgetgagg ttttetetga ggtttttttg
                                                                 3480
atgetttata ggaaaetatt ttttaaaaaaa ageeatttee caeecaagga caeagtggat
                                                                 3540
3600
etggtgeeet etteeetgge eaggaeacet eteeteetga tteeettgge acettgtett
                                                                 3660
tetgtetgtt tacetgtete cetgeetgee catetgeate ttttgeagee caetetgaet
                                                                 3720
tecatetggg ggetgagace accettgeet geceettet ttetgeetta agaatgteet
                                                                 3780
tttaggetgg geatggtgge teaegeetgt aaceecagea etttgggagg eggagaeggg
                                                                 3840
cagataacct gaggtcagga tttcgagacc aacctgacct acatggagaa actccgcctc
                                                                 3900
tagtaaaaat acaaaattag ccgggcatgg tggtgcacgc ctctaatccc agctactcgg
                                                                 3960
gaggetgagg caggagaate aettgaacee gggaagtgga ggttgeagtg agecaagagt
                                                                 4020
acaccactgc actccagcct gggcaacaga gcgagactcc gtcttaaaaa aaaaa
                                                                 4075
```

```
<210> 6224
<211> 1199
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1187)...(252)
<223> similar to gi4680695 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6224
ttttttttt ttccttgatt caaaaataca atttatttta aaaacaaaaa gagggaatgg
                                                                       60
atgcagaage cegtetggge ttteegtgga gtegeceett cecaatggeg atggeegete
                                                                      120
cctgtggcct cagcttcctc cgtggaatga aggggtccag gtgacacctt cctcgaaggg
                                                                      180
tgggcgtggg cctgaggctc ccaagtcggc caggggctcg gcctggctca gaagaggtgc
                                                                      240
ttcacatcaa cagtggtacg gggtggccgc tgggccctgg gtagcgtggg gtaggggtcg
                                                                      300
ggggaagtcg ctgtagggca ggctgaaggg gtagaggggt ctgtaacgtg agtcctgcca
                                                                      360
gagcagcttg tcctccagga aggcgacggt gggcagcgtc aggaccagcg tctggtgctt
                                                                      420
gagcatgctg tgcacattta ggccaacagc cgggatcaag ttgaaggtct taagcctaga
                                                                      480
ggtggcctcc acgatgctct gtggcatctc ctcgtgtgtt aagtccacga ggagtacgga
                                                                      540
gtccccccag cggcggtagt gcgccagctc tgtcaggtac tgtgggtctc cggtgggcag
                                                                      600
ctctagggag tccatgatgt gcaggtcgtc ctgggccagc ttgacggtca gtgccacttt
                                                                      660
gagacccagc gcccgcacct tcatgggcag catgtagtag taacttgtgg ggccccgggg
                                                                      720
gccatgggca acacctcctc ctcgccagag cggagagcgg atgctgccat gccgggcccg
                                                                      780
cccagtgcct ttctgcggcc aaggettccg gccaccgccc cgcacctcgg ctctcgtctt
                                                                      840
ggtcttggca tagctaattc tcttgaagtt cttctgccac atagcaacct ggtgcagtat
                                                                      900
gtccagcctg ggcgcggtgg cgaaaacatc ggggtgcagg tcggccaggc ccacgcgctc
                                                                      960
ctgctcgaag ccccgcaagg actcgaccca ggcctgcact gggcgtcgat gagtgggtac
                                                                     1020
```

```
cgggageteg actttgegea geacgggete egggagaece tegetegea eetgeteegg 1080 gtteteggte geacgegetg eetetteege eagggaaete aggeeetgge tgeeggtagg 1140 eegaageeag geeegegee eggeeeggae gaactgeage ategeegegg aegegtggg 1199
```

```
<210> 6225
<211> 676
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(510)
<223> similar to gi4929735 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6225
atccgggctc tgaccatgat ttggcgccgc gcggcgctgg cggggacgcg gctggtttgg
                                                                      60
agcaggageg geteggeagg etggettgae agggeggegg gagetgeggg agetgeggea
                                                                      120
gctgcggcct ctgggatgga gagcaataca tcatcatctt tggagaattt agcgacggcg
                                                                      180
cctgtgaacc agatccaaga aacaatttct gataattgtg tggtgatttt ctcaaaaaca
                                                                     240
tcctgttctt actgtacaat ggcaaaaaag cttttccatg acatgaatgt taactataaa
                                                                     300
gtggtggaac tggacctgct tgaatatgga aaccagttcc aagatgctct ttacaaaatg
                                                                     360
actggtgaaa gaactgttcc aagaatattt gtcaatggta cttttattgg aggtgcaact
                                                                     420
gacactcata ggcttcacaa agaaggaaaa ttgctcccac tagttcatca gtgttattta
                                                                     480
aaaaaaaagt aaaaggaaag aatttcagtg atgtttatac taataagttt gctagtacag
                                                                     540
tgtcagttat ttaaagtggt aatgcccgat aatgtctttt aaatgttttg agggatgttt
                                                                     600
taaaatacat gcattgtctt cacgaagaag atgtaaaaat aatgaacaat aaattgcggt
                                                                     660
ggaaacctct tcttaa
                                                                     676
```

```
<210> 6226
<211> 1826
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1827)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (361)...(1359)
<223> similar to gi1079682 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6226
gaattcggca cgaggcaggt cgggcggtac gacaggtcag agctgcggcc tgagcagcca
                                                                       60
gcgtccggca tgaaggtctg gggtctggct gctgcctgct tcttgctcca gcaccatgga
                                                                      120
atgeetgege agtttaceet geeteetgee eegegegatg agaetteeee ggeggaeget
                                                                      180
gtgtgccctg gccttggacg tgacctctgt gggtcctccc gttgctgcct gcggccgccg
                                                                      240
agccaacctg attggaagga gccgagcggc gcagctttgc gggcccgacc ggctccgcgt
                                                                      300
ggcaggtgaa gtgcaccggt ttagaacctc tgacgtctct caagccactt tagccagtgt
                                                                      360
agccccagta tttactgtga caaaatttga caaacaggga aacgttactt cttttgaaag
                                                                      420
gaagaaaact gaattatacc aagagttagg tetteaagce agagatttga gattteagca
                                                                      480
tgtaatgagt atcacagtca gaaacaatag gattatcatg agaatggagt atttgaaagc
                                                                      540
tgtgataact ccagagtgtc ttctgatatt agattatcgt aatttaaact taaagcaatg
                                                                      600
gctgttccgg gaactccctt cacagttgtc tggagagggt caactcgtta catacccttt
                                                                      660
accttttgag tttagagcta tagaagcact cctgcaatat tggatcaaca cccttcaggg
                                                                      720
gaaacttagc attttgcagc cactgatcct tgagaccttg gatgctttgg gggacccaa
                                                                      780
acattettet gtagacagaa gcaaactgca cattttacta cagaatggca aaagtetate
                                                                      840
agagttagaa acagatatta aaattttcaa agagtcaatt ttggagatct tggatgagga
                                                                      900
agagttgcta gaagagctct gtgtatcaaa atggagtgac ccacaagtct ttgaaaagag
                                                                      960
cagtgctggg attgaccatg cagaagagat ggagttgctg ttggaaaact actaccgatt
                                                                     1020
ggctgacgat ctctccaatg cagctcgtga gcttagggtg ctgattgatg attcacaaag
                                                                     1080
tattattttc attaatctgg acagccaccg aaacgtgatg atgaggttga atctacagct
                                                                     1140
gaccatggga accttetete tttegetett tggactaatg ggagttgett ttggaatgaa
                                                                     1200
tttggaatct tcccttgaag aggaccatag aattttttgg ctgattacag gaattatgtt
                                                                     1260
catgggaagt ggcctcatct ggaggcgcct gctttcattc cttggacgac agctagaagc
                                                                     1320
tccattgcct cctatggtat gaaggatatg gttcacggcg gtattgtgga agggttatga
                                                                     1380
tcatgggccc taaagtcaga gcgcctggga ttaagttgtc acaggcacta tggcccttgc
                                                                     1440
gagttgcttt ctcaaacttc cttcagtttc cctatctgtc agttaagtcg gtattacctg
                                                                     1500
cttcataggg ttatgggaag aattaaacaa tatgtgtaaa gcacttacta gcccactgcc
                                                                     1560
taacccaata agttagaaat ataatttgtg tagaactctg acaacataca tttaaacaga
                                                                     1620
tgttagtaat tctggtataa ggtttgtcat aaccaaatgg aaatgtagga aacatttata
                                                                     1680
atgttcttaa aagatagaaa attcccctcc attttctttg tacttgaaga tggcaccact
                                                                     1740
ggaataaata cttaagacac tgaaaaaaaa cctcgtgcca agctggcgta agcaggtccg
                                                                     1800
agactatcag tgggatcagg nnccct
                                                                     1826
```

```
<210> 6227
<211> 3354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (49)...(1852)
<223> similar to gi5360093 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6227
atacccggat cgacccacac gtccgggcgg gagtggcgtg gcgcagggat ggcacaaaag 60
aaatatcttc aagcaaaatt gacccagttt ttaagggaag acaggattca actttggaaa 120
cctccatata cagatgaaaa taaaaaagtt ggtttggcat taaaggacct tgctaagcag 180
```

```
240
tactctgaca gactagaatg ctgtgaaaat gaagtagaaa aggtaataga agaaatacgt
                                                                      300
tgcaaggcaa ttgagcgtgg aacaggaaat gacaattata gaacaacggg aattgctaca
                                                                      360
atcgaggtgt ttttaccacc aagactaaaa aaagatagga aaaacttgtt ggagacccga
ttgcacatca ctggcagaga actgaggtcc aaaatagctg aaacctttgg acttcaagaa
                                                                      420
aattatatca aaattgtcat aaataagaag caactacaac tagggaaaac ccttgaagaa
                                                                      480
caaggcgtgg ctcacaatgt gaaagcgatg gtgcttgaac taaaacaatc tgaagaggac
                                                                      540
                                                                      600
gcgaggaaaa acttccagtt agaggaagag gagcaaaatg aggccaaact caaagaaaaa
caaattcaga ggaccaagag aggactagaa atactggcaa agagagcagc agagacagtg
                                                                      660
                                                                      720
gtggatccag aaatgacacc gtacttagac atagctaacc agacaggcag atcaatcaga
attececcat cagaaagaaa ageeettatg ttagetatgg gatateatga gaagggcaga
                                                                      780
gctttcctga aaagaaaaga atatggaata gccttgccat gtctgttgga cgctgacaaa
                                                                      840
                                                                      900
tatttctgtg agtgttgcag agagctgctg gacacagtgg ataactatgc cgtcctccag
ctggatatag tgtggtgtta cttccgcctg gaacagctgg aatgccttga tgatgcagaa
                                                                      960
aaaaaattaa acttggccca gaaatgcttt aaaaattgtt acggagaaaa tcatcagaga
                                                                     1020
ctggtccaca taaaaggaaa ttgtgggaaa gagaaggtac tgtttctaag actctactta
                                                                     1080
cttcaaggga tccgaaacta tcacagtgga aatgatgtag aggcttatga gtatcttaac
                                                                     1140
aaggcacgtc agctctttaa agagctatat attgatccat caaaagtgga caatttgttg
                                                                     1200
cagttggggt ttactgccca ggaagcccgg cttggcctga gggcgtgtga tgggaacgtg
                                                                     1260
gatcatgcgg ccactcatat taccaaccgc agagaggaac tggcccaaat aaggaaggag
                                                                     1320
gaaaaagaga agaaaagacg ccgcctcgag aacatcaggt ttctgaaagg gatgggctac
                                                                     1380
tccacgcacg cggcccagca gattctgctc agcaatcctc agatgtggtg gttaaatgat
                                                                     1440
tccaatcctg aaaccgacaa ccgtcaagaa agtccttccc aggaaaacat tgaccgattg
                                                                     1500
gtgtacatgg gttttgatgc actcgtggcc gaagctgcgc tgagagtgtt cagaggcaac
                                                                     1560
gtccagctgg ccgcccagac ccttgctcac aacggaggaa gcctgcctcc cgagctgccg
                                                                     1620
ctgtcgccag aagactcttt gtccccgcca gccacgtccc cttctgactc cgcaggaacc
                                                                     1680
tctagtgcct caacagacga agacatggag acagaggccg tcaatgagat actggaagac
                                                                     1740
attccagage atgaggaaga ctatettgae teaactetgg aagatgaaga aattattatt
                                                                     1800
gcagagtacc tatcctatgt agaaaatagg aagtcagcga caaagaaaaa ctaaataatg
                                                                     1860
aacagaaata gcgctaattt tctgcttata aatgctatca ttatgaaaag gctaatgcag
                                                                     1920
ctctttctgt tcttactttt tatctgaatt acaagtcctc tttgggtgta ggagggggtg
                                                                     1980
ggcaggggac aagtccagga ggggtcccag ggccttcatg cgtggtctcg gggaagaagc
                                                                     2040
ttcctctggc ctggcgcagg ccgttccatc tgcctcccag gtctgcgtcc ctaaccctt
                                                                     2100
ccccagcttg gtgttttacc ccgaaacagg aaggaacagg ggtcctgtaa aacaggggtc
                                                                     2160
ctggggaagg tgtccagggc agggtcctgg gaagggtgtc ccgaccgctt cctctccagc
                                                                     2220
tgtggctcca tctgcccagc ttgcctgcct cctgcaccca ctgccctgac cttcctqctt
                                                                     2280
cccacgctgc catctctgcc agggtgccac atgggttcct gtgccaccct ttccccqccc
                                                                     2340
ctcaaatcgt cctttaagtc ttccttccaa gtgctgtggg gcataacgat gaggcgctgg
                                                                     2400
ccttgggggc cacaccaggt cgcagcaaat ggcttcagcc tgggacgcca gtgttttatg
                                                                     2460
ctcttagttc agtaaaatac gcccccgaaa ttcaagattg agtgtcaggc tttatatata
                                                                     2520
ttcagcattc ctcattacag aaatcttcta ttgaatggga aaggtttaaa tgctaaccaa
                                                                     2580
agcaatttat ttttaattaa tatttttaga ctctgtgctg tcatactgaa ctcactgcta
                                                                     2640
gctaagagac ctatcagaga tttagatata ttttctccag gttttttgtg ggttttcttt
                                                                     2700
gttgttgttg ttgttctagc catgtgacag aggctctttc taaaagtatg tagttcgctg
                                                                     2760
tgtgtcggct ccagcagtaa ccgtcctcac tgcgccacgc actcctctgt agatgtgtgc
                                                                     2820
ccagtgggag ttccttccag ccccaggacc gcagcagcag ccaggtgccg agtggattga
                                                                     2880
gtgccaggtg catccaagac tttccctccc ttccagaagg cactgactga agacaggatg
                                                                     2940
gatcatgcgg agccggctga aatgctccaa ctttttcaaa gtgtgggtgg tccagtttgg
                                                                     3000
actgatggga atcttcttgt cattcttttt aaacggatga taccqatgga aataaaaggt
                                                                     3060
gggaaatata ttcaaaaaaa aaaaaaaggg gggccctttt aaaagaaccc ttggggggcc
                                                                     3120
caaatttacc cggggttggc aaggtaaaat ttttttcctt atggggggcc tttttaaacc
                                                                     3180
ctccttggga tttttggaaa ggaacctttt ttttgggggg gggacttatt ggcccacccc
                                                                     3240
ccctccaaaa tttaaagcct ttagggaaaa aaaaaatttt taaggggaaa agggggaaaa
                                                                     3300
ccaaccccaa ttccctggct gttaaaaatt tttctttccg gagtagaatt aaga
                                                                     3354
```

```
<210> 6228
     <211> 933
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (77)...(747)
     <223> similar to gi5138924 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6228
cgtcggaact cggccgcggg acatccacgg ggcgcgagtg acacgcggga gggagagcag
                                                                       60
tgttctgctg gagccgatgc caaaaaccat gcatttctta ttcagattca ttgtttctt
                                                                      120
ttatctgtgg ggccttttta ctgctcagag acaaaagaaa gaggagagca ccgaagaagt
                                                                      180
gaaaatagaa gttttgcatc gtccagaaaa ctgctctaag acaagcaaga agggagacct
                                                                      240
actaeatgcc cattatgacg gctacctggc taaagacggc tcgaeattct actgcagccg
                                                                      300
gacacaaaat gaaggccacc ccaaatggtt tgttcttggt gttgggcaag tcataaaagg
                                                                      360
cctagacatt gctatgacag atatgtgccc tggagaaaag cgaaaagtag ttataccccc
                                                                      420
ttcatttgca tacggaaagg aaggctatgc agaaggcaag attccaccgg atgctacatt
                                                                      480
gatttttgag attgaacttt atgctgtgac caaaggacca cgaaagcatt gagacattta
                                                                      540
aacaaataga catggacaat gacaggcagc tctctaaagc cgagataaac ctctccttgc
                                                                      600
aaagggaatt tgaaaaagat gagaagccac gtgacaagtc atatcaggat gcagttttag
                                                                      660
aagatatttt taagaagaat gaccatgatg gtgatggctt catttctccc aaggaataca
                                                                      720
atgtatacca acacgatgaa ctatagcata tttgtatttc tactttttt ttctagctat
                                                                      780
ttactcgtac tttatgtata aaacaaagtc acttttctcc aagttgtatt tgctattttt
                                                                      840
cccctatgag aagatatttt gatctcccca atacattgat tttggtataa taaatgtgag
                                                                      900
gctgttttgc aaacttaaaa aaaagtcgac gcg
                                                                      933
     <210> 6229
     <211> 1083
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (110)...(610)
     <223> similar to gi4200249 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6229
ggcgggaccg gacttccggc tggtctgtgg ggtttcgggt tcgggggtttc ctggtgggcg
                                                                       60
tcaggggcag gcaacagagt ggcggccgct acggccctgg aacggggcca tggagaagct
                                                                      120
gcggcgagtc ctgagcggcc aggacgacga ggagcagggc ctgactgcgc aggattcaca
                                                                      180
gattaatctc ttgaggtcct ggatgcctca tcccttagtt tcaacaccag attgaaatgg
                                                                      240
tttgccatct gcttcgtatg tggcgttttc ttttctattc ttggaactgg attgctgtgg
                                                                      300
```

```
cttccgggcg gcataaagct ttttgcagtg ttttataccc tcggcaatct tgctgcgtta
                                                                      360
gccagtacat gctttttaat gggacctgtg aagcaactga agaaaatgtt tgaagcaaca
                                                                      420
agattgcttg caacaattgt tatgcttttg tgtttcatat ttaccctgtg tgctgctctt
                                                                      480
tggtggcata agaagggact ggctgtgtta ttctgcatat tgcagttctt gtcaatgacc
                                                                      540
tggtatagcc tgtcatacat cccatatgca agggatgcag ttattaaatg ctgttcttct
                                                                      600
ctcctaagtt gaaaatcaga aacttgtgga aaagagcact tgaatgttgg tactctatgt
                                                                      660
ttggtgaagt ttgcttttcc ccataaaaca ctccaggaac aactgacgtg acagttgaag
                                                                      720
accgttttgt actaagtctc attttgtata ctggtaaaaa ctacatgctt gattaaacca
                                                                      780
ttaaatgctt gtaactttaa attcattatg tgtcattaat atacttttcc aaagataaga
                                                                      840
tttttaatca ctgccagttg taaattattt ttagccaatt tttaaatctt ttcaaaqcaq
                                                                      900
ctttgaaatg tgaatattta aaggtagacc tgtgctgcaa gataattaaa cttttttgct
                                                                      960
tttaaaaaaa gtctgcattt ttaagatttt ttttacttta aatgtgaaac ttattttaag
                                                                     1020
ctaaaaattg cttattatat gtaataaaaa taatatataa atctttacaa ttttgaaata
                                                                     1080
                                                                     1083
```

```
<210> 6230
<211> 1981
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1982)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(1567)
<223> similar to gi3451240 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6230
acagagatgg cactgatgca ggaactgtat agcacaccag cctccaggct ggactccttc
                                                                       60
gtggctcagt ggctgcagcc ccaccgggag tggaaggaag aggtgctaga cgctgtgcgg
                                                                      120
accgtggagg agtttctgag gcaggagcat ttccagggga agcgtgggct ggaccaggat
                                                                      180
gtgcgggtgc tgaaggtagt caaggtgggc teetteggga atggcacggt tetcaggage
                                                                      240
accagagagg tggagctggt ggcgtttctg agctgtttcc acagcttcca ggaggcagcc
                                                                      300
aagcatcaca aagatgttct gaggctgata tggaaaacca tgtggcaaag ccaggacctg
                                                                      360
ctggacctcg ggctcgagga cctgaggatg gagcagagag tccccgatgc tctcgtcttc
                                                                      420
accatecaga ecagggggae tgeggageee ateaeggtea ecattgtgee tgeetacaga
                                                                      480
geeetgggge ettetetee caacteecag ecacecetg aggtetatgt gageetgate
                                                                      540
aaggcctgcg gtggtcctgg aaatttctgc ccatccttca gcgagctgca gagaaatttc
                                                                      600
gtgaaacatc ggccaactaa gctgaagagc ctcctgcgcc tggtgaaaca ctggtaccag
                                                                      660
cagtatgtga aagccaggtc ccccagagcc aatctgcccc ctctctatgc tcttgaactt
                                                                      720
ctaaccatct atgcctggga aatgggtact gaagaagacg agaatttcat gttggacgaa
                                                                      780
ggcttcacca ctgtgatgga cctgctcctg gagtatgaag tcatctgtat ctactggacc
                                                                      840
aagtactaca cactccacaa tgcaatcatt gaggattgtg tcagaaaaca gctcaaaaaa
                                                                      900
gagaggecea teateetgga teeggeegae eecaceetea aegtggeaga agggtacaga
                                                                      960
tgggacatcg ttgctcagag ggcctcccag tgcctgaaac aggactgttg ctatgacaac
                                                                     1020
agggagaacc ccatctccag ctggaacgtg aagagggcac gagacatcca cttgacagtg
                                                                     1080
```

```
gagcagaggg gttacccaga tttcaacctc atcgtgaacc cttatgagcc cataaggaag
                                                                     1140
gttaaagaga aaatccggag gaccaggggc tactctggcc tgcagcgtct gtccttccag
                                                                     1200
gttcctggca gtgagaggca gcttctcagc agcaggtgct ccttagccaa atatgggatc
                                                                     1260
ttctcccaca ctcacatcta tctgctggag accatccctt ccgaagatcc aggtcttcgt
                                                                     1320
gaagaateet gatggtggga agetaegeet atgceattea acceecaaca getteateet
                                                                     1380
gggtctgaag cagcagattg aagacccanc aggggcttcc taaaaaggca gcagcagctg
                                                                     1440
gaatteecaa ggecaaagte etgeaaggae tggttggggt etggggattt tatggeatee
                                                                     1500
aagacaagtg acacteteaa teetetegga agaagaaagg agaggetetg ttteeageea
                                                                     1560
gttagttttc tctgggagac ttcttctgta catttctgcc atgtactcca gaactcatcc
                                                                     1620
tgtcaatcac tctgtcccat tgtctactgg gaaggtccca ggtcttcacc agttttacaa
                                                                     1680
tgagttatcc caggccagac gtggtggctc acacctgtaa tcccagaact ttgggaggcc
                                                                     1740
gaggtgggag gagcgcttga gccgaggagt tcaagaccag cctgggtatc acagggagac
                                                                     1800
ecegteteta caaaataaaa aaataattea etgggtgtgg ttgtgeacat ttgtggtete
                                                                     1860
aggcactegg gaggetgagg cagaagaate gettgageee aggaggetga ggetgeagtg
                                                                     1920
agetgtgate acacegetae teteetgeee aggeeacaga geatgaeeet gtgtetaaaa
                                                                     1980
                                                                     1981
```

```
<210> 6231
<211> 1390
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (109)...(1101)
<223> similar to gi178067 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6231 acttcccagg ggctatataa cccttcagct ttcagcttcc ctgaacacca cccagtgtgg 60 agcagcccag ccaagcactg tcaggaatcc tgtgaagcag ctccagctat gtgtgaagaa 120 gaggacagca ctgccttggt gtgtgacaat ggctctgggc tctgtaaggc cggctttgct 180 ggggacgatg ctcccagggc tgttttccca tccattgtgg gacgtcccag acatcagggg 240 gtgatggtgg gaatgggaca aaaagacagc tacgtgggtg acgaagcaca gagcaaaaga 300 ggaatcctga ccctgaagta cccgatagaa catggcatca tcaccaactg ggacgacatg 360 gaaaagatct ggcaccactc tttctacaat gagcttcgtg ttgcccctga agagcatccc 420 accetgetea eggaggeace cetgaacece aaggeeaace gggagaaaat gaeteaaatt 480 atgtttgaga ctttcaatgt cccagccatg tatgtggcta tccaggcggt gctgtctctc 540 tatgcctctg gacgcacaag ctggcatcgt gctgtactct ggatatggtg tcacccacaa 600 tgtccccatc tatgagggct atgctttgcc ccatgccatc atgcgtctgg atctggctgg 660 ccgagatete actgactace teatgaagat cctgactgag cgtggetatt ccttcgttac 720 tactgctgag cgtgagattg tccgggacat caaggagaaa ctgtgttatg tagctctgga 780 ctttgaaaat gagatggcca ctgccgcatg gtcatcctcc cttgagaaga gttacgagtt 840 gcctgatggg caagtgatca ccatcggaaa tgaacgtttc cgctgcccag agaccctgtt 900 ccagccatcc ttcatcggga tggagtctgc tggcatccat gaaaccacct acaacagcat 960 catgaagtgt gatattgaca tcaggaagga cctctatgct aacaatgtcc tatcaggggg 1020 caccactatg taccctggca ttgccgaccg aatgcagaag gagatcacgg ccctagcacc 1080 cagcaccatg aagatcaaga tcattgcccc tccggagcgc aaatactctg tctggatcgg 1140 tggctccatc ctggcctctc tgtccacctt ccagcagatg tggatcagca aacaggaata 1200 cgatgaagcc gggccttcca ttgtccaccg caaatgcttc taaaacactt tcctgctcct 1260

```
ctctgtctca tgcacacac tgtgaatgtc ctgtggaatt atgccttcag ttcttttcca 1320 aatcattcct agccaaagct ctgactcgtt acctatgtgt tttttaataa atctgaaata 1380 ggctactggt 1390
```

```
<210> 6232
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1502)...(1718)
<223> similar to gill60613 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6232 ttttttttt ttcatagtaa tgtaaaacca tttgtttaat tctaaatcaa atcactttca 60 caacagtgaa aattagtgac tggttaaggt gtgccactgt acatatcatc attttctgac 120 tggggtcagg acctggtcct agtccacaag ggtggcagga ggagggtgga ggctaagaac 180 acagaaaaca cacaaaagaa aggaaagctg ccttggcaga aggatgaggt ggtgagcttg 240 ccgaaggatg gtgggaaggg ggctccctgt tggggccgag ccaggagtcc caagtcagct 300 ctcctgcctt acttagctcc tggcagaggg tgagtgggga cctacgaggt tcaaaatcaa 360 atggcatttg gccagcctgg ctttactaac aggttcccag agtgcctctg ttggctgagc 420 teteetggge teactecatt teattgaaga gteeaaatga tteattttee tacceacaae 480 ttttcattat tcttctggaa acccatttct gttgagtcca tctgacttaa gtcctctctc 540 cctccactag ttggggccac tgcactgagg ggggtcccac caattctctc tagagaagag 600 acactccaga ggcccctgca actttgcgga tttccagaag gtgataaaaa gagcactctt 660 gagtgggtgc ccaggaatgt ttaaaatcta tcaggcacac tataaagctg gtggtttctt 720 cctaccaagt ggattcggca tatgaaccac ctactcaata ctttatattt tgtctgttta 780 aacactgaac tctggtgttg acaggtacaa aggagaagag atggggacta tgaagagggg 840 agggetteee teatetteet caagatettt gttteeacaa actatgeagt cataattgag 900 aaaaagcaat agatggggct teetaeeatt tgttggttat tgetggggtt ageeaggage 960 agtgtggatg gcaaagtagg agagaggccc agaggaaagc ccatctccct ccagctttgg 1020 ggtctccaga aagaggctgg atttctggga tgaagcctag aaggcagagc aagaactgtt 1080 ccaccaggtg aacagtccta cctgcttggt accatagtcc ctcaataaga ttcagaggaa 1140 gaagettatg aaactgaaaa teaaateaag gtattgggaa gaataattte eectegatte 1200 cacaggaggg aagaccacac aatatcattg tgctggggct ccccaaggcc ctgccacctg 1260 getttacaaa teateagggg ttgeetgett ggeagteaca tgetteeetg gttttageae 1320 acatacaagg agttttcagg gaactctatc aagccatacc aaaatcaggg tcacatgtgg 1380 gtttcccctt tccttgcctc ttcataaaag acaacttggc ttctgaggat ggtggtcttt 1440 tgcatccagt tgggctgacc tgacaaagcc cccagtttcc tgtggcaggt tctgggagag 1500 gatgcattca agcttctgca gcctagggga cagggctgct tgttcagtta ttactgcctc 1560 ggagctccaa atcccaccaa agtcctgact ccaggtcttt cctaatgcac agtagtcagt 1620 ctcagcttcg gcagtattct cggctgtatg ttctctggca gagagaggca gatgaacata 1680 gttttaggga gaaagctgat gggaaacctg tgagttaagc cacatgtctc cccaggaata 1740 atttatgcca ggaaaccagg aagtcattca agttgttctc tgaggccaaa gacactgagc 1800 acageceaga gecaataaaa gatetttgag tetetggtga atteaegaag tgaeeceage 1860 tttagctact gcaattatga tttttatggg acagcaattt cttgcatctc tacagaggaa 1920 gaagagggg agtgggaggg gaaggaaaga gaacagagcg gcactgggat ttgaaagggg 1980 aacctctcta tctgaggagc ccccactggc ttcagaag 2018

```
<210> 6233
<211> 1583
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (97)...(1328)
<223> similar to gi1785654 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 6233 aggaacgaga gcggagcgga gcacagtccg ccgagcacaa gctccagcat cccqtcaqqq 60 gttgcaggtg tgtgggaggc ttgaaactgt tacaatatgg ctttccttgg actcttctct 120 ttgctggttc tgcaaagtat ggctacaggg gccactttcc ctgaggaagc cattgctgac 180 ttgtcagtga atatgtataa tcgtcttaga gccactggtg aagatgaaaa tattctcttc 240 tctccattga gtattgctct tgcaatggga atgatggaac ttggggccca aggatctacc 300 cagaaagaaa tccgccactc aatgggatat gacagcctaa aaaatggtga agaattttct 360 ttcttgaagg agttttcaaa catggtaact gctaaagaga gccaatatgt gatgaaaatt 420 gccaattcct tgtttgtgca aaatggattt catgtcaatg aggagttttt gcaaatgatg 480 aaaaaatatt ttaatgcagc agtaaatcat gtggacttca gtcaaaatgt agccgtggcc 540 aactacatca ataagtgggt ggagaataac acaaacaatc tggtgaaaga tttggtatcc 600 ccaagggatt ttgatgctgc cacttatctg gccctcatta atgctgtcta tttcaagggg 660 aactggaagt cgcagtttag gcctgaaaat actagaacct tttctttcac taaagatgat 720 gaaagtgaag tccaaattcc aatgatgtat cagcaaggag aattttatta tggggaattt 780 agtgatggct ccaatgaagc tggtggtatc taccaagtcc tagaaatacc atatgaagga 840 gatgaaataa gcatgatgct ggtgctgtcc agacaggaag ttcctcttqc tactctqqaq 900 ccattagtca aagcacagct ggttgaagaa tgggcaaact ctgtgaagaa gcaaaaagta 960 gaagtatacc tgcccaggtt cacagtggaa caggaaattg atttaaaaga tgttttgaag 1020 gctcttggaa taactgaaat tttcatcaaa gatgcaaatt tgacaggcct ctctgataat 1080 aaggagattt ttctttccaa agcaattcac aagtccttcc tagaggttaa tgaagaggct 1140 cagaagctgc tgctgtctca ggaatgattg caattagtag gatggctgtg ctgtatcctc 1200 aagttattgt cgaccatcca tttttctttc ttatcagaaa caggagaact ggtacaattc 1260 tattcatggg acgagtcatg catcctgaaa caatgaacac aagtggacat gatttcgaag 1320 aactttaagt tactttattt gaataacaag gaaaacagta actaagcaca ttatgtttgc 1380 aactggtata tatttaggat ttgtgtttta cagtatatct taagataata tttaaaatag 1440 ttccagataa aaacaatata tgtaaattat aagtaacttg tcaaggaatg ttatcagtat 1500 taagctaatg gtcctgttat gtcattgtgt ttgtgtgctg ttgtttaaaa taaaagtacc 1560 tattgaacat gtgaaaaaaa aaa 1583

```
<210> 6234
<211> 1788
<212> DNA
```

```
<220>
<221> misc_feature
<222> (1510)...(594)
<223> similar to gi36613 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6234 tttttttttt ttcaggaaca taccacgttt atttcttgtt gtcaagccag aaatgaacca 60 aaagaagcac atctcaggtg aaggaacaac tccttattgc agtcatagcc cagctctcct 120 gggatccggg gaacgccctc tctcctctcc ctcactccct cctgtttaac ttgggactga 180 actggaactc aactetteec ccaaacattt taaatecaaa aagaccagca gggggegeec 240 tttcctcagg gtctggccct gcaggcaggg caggtgaggg cctgaatacc cacacccagc 300 tetggeagge eccetgeett caacttggea ettgttecag tgeeegggga eccetegtge 360 atggagcatc tgtgcctcta ttttgaaacg gcaccgtcca acccaaaaaa caacacagga 420 tctcgctaac ctgcgggcag gactaaccca gactcagccc tctgcaggct gatgctgaat 480 teettagtge titgetetee ceagatgeat cetetettgg caatgggtag gaggeagetg 540 gggcagcagc tgctgctcga gaaaggatct gagtgtggcc ttgacattct caatggcgga 600 atcgctgcag cacatactgg cgggcagctg gggagggctc aggggatgag aagtacgggt 660 gggccagggc agtcttggct gtgatccgct ggctggggtc atactgcagg agttgcatga 720 gcaggtccct gccctctggc tccagattgg gcacaatctc ttccagtccc ttcctggtcc 780 acttagggaa gctgccctta tagtcaggca gctgggtgac cccgggccat gtgtcttcgc 840 tgggtgtccc cagcatacga aagatacgaa agagettggt caatetcaag agtcaccagg 900 aaacagggct tttcgagtca ccatctctgc aaagatgcaa ccaatgctcc agatatccac 960 agctgtggta tagaacctgg ttgccaagag aatctcgggg gcgcgatacc acagtgtcac 1020 cacctcatgg gtgtaggtgc gcaggggcac cccgaaggcg cgagccaggc cgaagtcagc 1080 cagcttgatg gcacccaact cattgatgag caggttctgg ggcttcaggt ctcggtggat 1140 gacccgatgt gagtggcaga aactcacccc ctgcagcagc tggaagaggt agctcttgat 1200 gaggtgcagg gggagctctg agcctggggt ggagtccatg tacttcttca ggtcctggct 1260 gaggaactca aacaccagat agagcttcct ctcgttgtgc accacgtcca gcagtctgac 1320 gatgttgggg tgcttcagtt ccttgagcag cgagatctcc ctgatggcag tgcttgggac 1380 cocctocate tecaaateca gtetgatett etteagggee accaqetqee etqtetecet 1440 gttcttggcc ttgtacacca ccccataggt gccctctccg atcttctcta ccttctggaa 1500 catatecatg gecacagage tgeetgggaa acagaaggea etgggeaatt tgeaceceae 1560 gcccageget ecegttgete etecagette catgtggege cetgeccage ccageccage 1620 ccagactgcc cageteccaa ggccetegge etagecacee caaceccage teatectgce 1680 tgggaacetg getgggggte ggccacece cetcacecag eccagecece cetteaaggg 1740 ggtcaggggg cccccttaac accagaccag ttcagccagg acccccag 1788

```
<210> 6235
<211> 2176
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (96)...(1884)
<223> similar to gi1854512 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6235
attggcacca gggttactgg gagggggctt gctgtggccc tgtcaggaag agtagagctc
                                                                       60
tggtccagct ccgcgcaggg agggaggctg tcaccatgcc ggcctgctgc agctgcagtg
                                                                      120
atgttttcca gtatgagacg aacaaagtca ctcggatcca gagcatgaat tatggcacca
                                                                      180
ttaagtggtt cttccacgtg atcatctttt cctacgtttg ctttgctctg gtgagtgaca
                                                                      240
agctgtacca gcggaaagag cctgtcatca gttctgtgca caccaaggtg aaggggatag
                                                                      300
cagaggtgaa agaggagatc gtggagaatg gagtgaagaa gttggtgcac agtgtctttg
                                                                      360
acaccgcaga ctacaccttc cctttgcagg ggaactcttt cttcgtgatg acaaactttc
                                                                      420
tcaaaacaga gggccaagag cagcggttgt gtcccgagta tcccacccgc aggacgctct
                                                                      480
gttcctctga ccgaggttgt aaaaagggat ggatggaccc gcagagcaaa ggaattcaga
                                                                      540
ccggaaggtg tgtagtgcat gaagggaacc agaagacctg tgaagtctct gcctggtgcc
                                                                      600
ccatcgaggc agtggaagag gcccccggc ctgctctctt gaacagtgcc gaaaacttca
                                                                      660
ctgtgctcat caagaacaat atcgacttcc ccggccacaa ctacaccacg agaaacatcc
                                                                      720
tgccaggttt aaacatcact tgtaccttcc acaagactca gaatccacag tgtcccattt
                                                                      780
teegaetagg agaeatette egagaaacag gegataattt tteagatgtg geaatteagg
                                                                      840
geggaataat gggeattgag atetaetggg aetgeaacet agaeegttgg tteeateact
                                                                      900
gecateceaa atacagttte egtegeettg aegacaagae caccaaegtg teettgtace
                                                                      960
ctggctacaa cttcagatac gccaagtact acaaggaaaa caatgttgag aaacggactc
                                                                     1020
tgataaaagt cttcgggatc cgttttgaca tcctggtttt tggcaccgga ggaaaatttg
                                                                     1080
acattateca getggttgtg tacategget caaceetete etaetteggt etggeegetg
                                                                     1140
tgttcatcga cttcctcatc gacacttact ccagtaactg ctgtcgctcc catatttatc
                                                                     1200
cctggtgcaa gtgctgtcag ccctgtgtgg tcaacgaata ctactacagg aagaagtgcg
                                                                     1260
agtecattgt ggagecaaag eegacattaa agtatgtgte etttgtggat gaateecaca
                                                                     1320
ttaggatggt gaaccagcag ctactaggga gaagtctgca agatgtcaag ggccaagaag
                                                                     1380
teccaagace tgegatggae tteacagatt tgtecagget geceetggee etecatgaca
                                                                     1440
cacccccgat teetggacaa ceagaggaga tacagetget tagaaaggag gegacteeta
                                                                     1500
gatecaggga tageceegte tggtgecagt gtggaagetg ceteccatet caacteeetg
                                                                     1560
agagccacag gtgcctggag gagctgtgct gccggaaaaa gccgggggcc tgcatcacca
                                                                     1620
cctcagagct gttcaggaag ctggtcctgt ccagacacgt cctgcagttc ctcctgctct
                                                                     1680
accaggagee ettgetggeg etggatgtgg attecaceaa eageeggetg eggeaetgtg
                                                                     1740
cetacaggtg ctacgccace tggcgcttcg gctcccagga catggctgac tttgccatcc
                                                                     1800
tgccccagct cgtgccgctg gaggatcccg gaaagagttt ccaaagagtg aagggcagta
                                                                     1860
cagtggcttc aagagtcctt actgaagccc aggcaccgtg gctcacgtct gtaatcccag
                                                                     1920
cgctttggga ggccgaggca ggcagatcac ctgaggtcgg gagttggaga cccgcctggc
                                                                     1980
taacaaggcg aaatcctgtc tgtactaaaa atacaaaaat cagccagaca tggtggcatg
                                                                     2040
cacctgcaat cccagctact cgggaggctg aggcacaaga atcacttgaa cccgggaggc
                                                                     2100
agaggttgta gtgagcccag attgtgccac tgctctccag cctgggaggc acagcaaact
                                                                     2160
gtccccaaaa aaaaaa
                                                                     2176
```

```
<210> 6236
<211> 6321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(5880)
<223> similar to gi2662089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6236

tttegteggg gategeegge gggeggeaag eggaggegge eeaggeeegg eggteteega 60 gatgtcacga tggctgtggc catggtcaaa ctgtgtgaaa gagcgggtct gccgctactt 120 180 getgeaceae taettaggte aettetteea agageacete ageetggaee ageteageet 240 cgatctgtac aagggcagcg ttgccctqcg agacatccac ctggaaatct ggtctgtgaa 300 cgaggtgctg gagtcaatgg agtcaccgct ggagctggtg gaaggcttcg tgggctccat 360 egaggtggee gtgeeetggg etgetetget cacegaecae tgeaeagtge gegtgteegg 420 cctccagctc accttgcagc cccgccgggg tccagcgcca ggggctgccg actcacagag 480 ctgggcctca tgcatgacca caagcctgca gctggcccag gagtgtctgc gggatgggct 540 accggagccc tetgagccac cacagcccct ggaggggctg gagatgtttg cccagaccat tgagactgtg cttcggagga tcaaagtgac cttcctggac actgtcgtga gggtggagca 600 660 eteteegggt gatggggaac gtggtgtgge egtegaggte egtgtgeaga gaetggagta 720 ctgtgatgag gcagtgcggg acccaagcca ggcgccgccg gtggatgtgc atcagccgcc tgccttcctg cacaagctgc tgcagctggc aggggtccgc ctgcactacg aggagetccc 780 ggcacaggaa gagcctccag agcccccctt gcagatcggc agctgctcag ggtacatgga 840 900 gctgatggtg aagttgaagc aaaatgaggc cttccctggc cccaagttgg aggtggcggg acagetggge tecetgeace tgeteetgae eeegaggeag etecageaac tteaggaact 960 1020 gctcagcgcc gtgagcctta cagaccacga gggcctggct gacaagctga acaagagccg cccgctaggt gccgaagacc tgtggctgat tgagcaggac ctgaaccagc agctgcaggc 1080 aggggcagtg gctgagcccc tcagcccaga cccccttacc aacccccttc tcaacctgga 1140 taacactgac ctcttcttct ccatggctgg cctcacaagc agtgtggcct cagccctctc 1200 tgagetetee eteteegatg tagaeetgge eteetetgtg egeagegaea tggeeteeeg 1260 ceggetetet geceaggee acceagetgg caagatggee ceeaaceee teetggacae 1320 catgegeect gaetegetge tgaagatgae ettggggggt gtgaeectga eettgettea 1380 gacgtctgcc ccatcttccg gaccacctga cctcgccacg cactttttca ccgagtttga 1440 tgccaccaag gatgggccct tcggttcccg agacttccat caccttcgac cacgcttcca 1500 gagggcctgt ccctgtagcc atgttcggct aacgggcaca gccgtgcagc tgtcctggga 1560 getgeggaeg ggeagteggg geeggeggae aaccageatg gaagtgeact tegggeaget 1620 ggaggtgctg gagtgtctgt ggccccgggg cacctctgag cctgagtaca cggagatcct 1680 gacettteet ggtacgetgg geteccagge etcagetegg ceetgegeec atetgegeea 1740 cacacagate etgegeègtg tgeetaagag eegaceeegg egeteagttg eetgeeattg 1800 ccactcagaa ctggccctgg acctggccaa cttccaggcg gacgtggagc tgggggccct 1860 ggaccggctg gccgccctac tgcgcctggc caccgtacct gctgagcctc cagccggcct 1920 gctgacagag cccctgccgg cgatggagca gcagacggta tttcggctct ctgcaccccg 1980 ggccacgctg cggctgcgct tececattgc cgacctgcgg cctgagcggg acccctgggc 2040 gggccaggcc gtgcgggctg agcagcttcg gctggagctg agtgagcccc agttccggtc 2100 agagettage agtgggeetg gteececagt ceceacecae etggaactea cetgeteega 2160 cctacatggt atctatgaag atggagggaa gccacctgtc ccttgcctgc gtgtctccaa 2220 agccctggac cccaagagca ctgggcgcaa gtacttcctg ccccaggtag tggtgactgt 2280 gaacccccag tccagcagca cacagtggga ggtggccccg gagaagggag aggaactgga 2340 getgteagtg gagagteeet gtgagetgeg ggaacetgag ceetegeeet teteetetaa 2400 gaggaccatg tatgagacag aggagatggt gatccctgga gaccctgagg agatgaggac 2460 gttccagagc cggaccctgg cactgtcccg ctgcagcctg gaagtgatcc tgcccagtgt 2520 ccacatettt etgeecagea aggaggteta egagageate tacaacagga teaacaacga 2580 cetgeteatg tgggageetg cagatetget teccaecece gaeeeegeeg eccageete 2640 gggcttcccc ggcccctcag gcttctggca cgacagcttt aagatgtgca agtcagcctt 2700 caagetggee aactgetttg ateteaceee agaeteggae teggatgaeg aggatgeeea 2760 cttcttctca gtgggggcat caggtggccc acaggccgct gcccctgagg ccccaagtct 2820 teacttgcag ageacettet etacaetggt gacagtgetg aaggggegga teacageeet 2880 ctgtgagacc aaggatgagg gtgggaagcg gctggaggct gtgcacgggg agctggtgct 2940 ggacatggag cacggtaccc tcttcagcgt ctcccagtac tgtggccagc caggacttgg 3000 ctacttctgt ctggaagctg aaaaggcaac actctaccac cgagcggccg tggatgacta 3060 cccgctgccc agtcacctgg accttcccag tttcgctccc ccggctcagc tggccccaac 3120 catctaccca tcggaggaag gggtgaccga gcggggagcc tcgggccgca agggccaggg 3180 ceggggacce cacatgttgt ccactgetgt gegeatecae etggaccece acaagaatgt 3240

```
gaaggaqttc ctggtgacac tgcqgttgca caaagccacc ttgcgccact acatggccct
                                                                   3300
gcccgagcag agctggcatt cccagttgtt ggagttccta gacgtgctgg atgaccctgt
                                                                   3360
getgggetae etgececega eggteateae cateetgeae acacacetgt teteetgete
                                                                   3420
tgtggactat aggccactct acctcccagt gcgtgtcctc atcaccgcgg agaccttcac
                                                                   3480
tetetecage aacateatea tggacacete cacetteetg eteaggttea teetegatga
                                                                   3540
ctccgccttg tacctgtccg acaagtgtga ggtggagacc ctggacctgc ggcgagatta
                                                                   3600
tgtctgtgtt ttggatgttg acctcttgga acttgtgatt aaaacctgga aagggagcac
                                                                   3660
3720
gcacagetgt geegacteet gtgeeetget ggteaacetg etecagtacg taatgageae
                                                                  3780
aggogatotg caccoccac cocggccccc cagcoccacg gagatogccg gocagaagct
                                                                   3840
ctcggagagt cetgcetete tgccetegtg cccccagtg gagacggece tcatcaacca
                                                                   3900
gegtgacetg geegaegeee teetggacae egagegeage etaegggage tggeeeagee
                                                                  3960
ttcaggtggc cacctccctc aggcgtcgcc catctccgtc tacctattcc caggtgaacg
                                                                   4020
gagtggggcc ccaccccctt caccacctgt cgggggccct gctggcagct tagggtcatg
                                                                  4080
ctcagaggag aaggaagatg aaagggaaga ggagggcgat ggagacaccc tggacagtga
                                                                   4140
tgagttctgc atccttgatg ctcccggcct gggcatcccg ccccgagatg gggagcctgt
                                                                   4200
ggtgacacag ctgcatcccg gccccatcgt tgtgagggac ggttacttct cacggccgat
                                                                  4260
cggcagcacg gactttgctt cgggcaactg cccatttccc agtgcccagc actcgggtgg
                                                                   4320
tgctacgtga ggtctccctc gtctggcacc tctatggggg ccgagacttt ggcccccacc
                                                                   4380
ccggccacag ggcaagaact ggcctctcag gtcccaggag ctccccttcc cgctgctctg
                                                                  4440
gccccaaccg gccccagaac tcatggcgca cgcagggggg cagcgggcgg cagcaccatg
                                                                  4500
tecteatgga gatecagetg ageaaggtaa getteeagea egaggtgtae eeageggage
                                                                  4560
cagccacagg ccctgcggcc cccagccagg agctggagga gcgaccgctg tcccgtcagg
                                                                  4620
tgttcatcgt gcaggagctg gaggtccaaa accggctcgc ctcctcccag atcaacaagt
                                                                  4680
teetgtaeet acacaegagt gageggatge egegaegtge ceaetetaae atgeteaeca
                                                                  4740
tcaaagcgct gcatgtggcc cccactacca acctgggtgg gcctgagtgc tgtctccgcg
                                                                  4800
tetegetgat geceetgegg eteaatgtgg accaggatge cetettette eteaaggaet
                                                                  4860
tetteactag tetgggggee ggeateaace cegtggteec aggggagace teegetgagg
                                                                  4920
ctegeceega gaetegagee cageeeagea geceeetgga agggeaggee gaaggegtag
                                                                  4980
5040
agcccatcta cttcagagag ttccgcttca cgtctgaggt ccccatctgg ctggattacc
                                                                  5100
atggcaagca cgtcacgatg gaccaggtgg gcacttttgc tggcctcctc atcggcctqq
                                                                  5160
eccaacteaa etgeteegag etgaagetaa ageggetetg ttgeaggeae gggeteetgg
                                                                  5220
gtgtggacaa ggtgctgggc tatgccctca acgagtggct gcaggacatc cgcaagaacc
                                                                  5280
agctgcccgg cctgctggga ggcgtgggcc ccatgcactc ggttgtccag ctcttccaag
                                                                  5340
ggttccggga cctgctgtgg ctgcccattg agcagtacag gaaggatggc cgcctcatgc
                                                                  5400
gggggctgca gcgaggggct gcctcctttg gctcatccac agcctctgcc gccctggaac
                                                                  5460
tcagcaaccg gttggtacag gctatccagg ccacagctga gaccgtgtat gacatcctqt
                                                                  5520
ccccggcagc ccccgtctcc cgctccctgc aggataagcg ctctgcgcgg aggctgcgca
                                                                  5580
ggggccagca gcctgccgac ctgcgggagg gtgtggccaa ggcctacgac acagtgcgag
                                                                  5640
agggcatett ggatacaget cagaceatet gtgacgtgge ategegggge catgageaga
                                                                  5700
aggggctgac gggcgccgtg gggggcgtga tccgccagct gcccccgact gtggtgaagc
                                                                  5760
egeteateet ggeeaeggag geeaegteea geetgetegg gggeatgege aaccagattg
                                                                  5820
teccegaege ceacaaggae caegeeetea agtggegete ggaeagtgee caagaetgag
                                                                  5880
cctggggtgc ccggcaccca gaggggtgct gcccaccatg ctcctgagcc tcccaagagc
                                                                  5940
tgcagcccac gggcccggcc cggcctggcc cttcagggga tggccactgt gaaggacgcc
                                                                  6000
ttcccagcct gcccgttgcc aatctgctgt gagagggggg cctccctgcc ttggggcctt
                                                                  6060
agccctggct ctgcactttt cctccgggga gaaaggacac tgcccctccc ccgacctggg
                                                                  6120
cccacactgc tgccttctcc caggacggag gcttttggac cctcggaccc catcccactc
                                                                  6180
agccaagtgt ctttctgtgt ctggggggag gaggggatga tatccgtgtg gttcgatgta
                                                                  6240
ttatttttaa geteegtgag tgegtgggte aagtgtetge atgaagtgga ataaactgee
                                                                  6300
caccgccaaa aaaaaaaaa a
                                                                  6321
```

```
<210> 6237
<211> 3387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (430)...(1935)
<223> similar to gi1418759 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6237 ggaaatetgg gaggagtgte ettggggeag eattttaaaa gggggaggga aetgeggeta 60 aagagacgtt cggtgatggg agcgcaatgt atgaggggat acagtgcctc aggtttaaaa 120 gagcaggaag ctgagtgaga ggttgcagaa aaagtgtett egeteggeag aggttacagg 180 tggcatctca gaaagagctt tgaggctaca ggctgtagtc gggaagggga tcggagaact 240 gtgtgaaggg acagcttagg gactagcgtc ctgggactag ggggaagttc gcgactttct 300 gaagactggc aggaatgtgc ctcctggccc tcgatgcttc ccccctgagg ggaggcatcq 360 tgagggactg tggcaggctt cactgaacgc tgagccgggg aggtccaact ccacgtatgg 420 atccggggaa tgagaattca gccacagagg ctgccgcgat catagaccta gatcccgact 480 tegaacecca gageegteec egeteetgea eetggeeeet teecegaeea gagategeta 540 accageegte caageegeee gaggtggage cagatetggg ggaaaaggta caeaeggagg 600 ggegeteaga geegateetg ttgeeetete ggeteecaga geeggeeggg ggeeeceage 660 ccggaatcct gggggctgta acaggtcctc ggaagggagg ctcccgccgg aatgcctggg 720 gaaatcagtc atatgcagaa ctcatcagcc aggccattga aagcgccccg gagaagcgac 780 tgacacttgc ccagatctac gagtggatgg tccgtactgt accctacttc aaggacaagg 840 gtgacagcaa cagctcagca ggatggaaga actcgatccg ccacaacctg tccctgcaca 900 gcaagttcat caaggttcac aacgaggcca ccggcaaaag ctcttggtgg atgctgaacc 960 ctgagggagg caagagegge aaageeeeee geegeeggge egeeteeatg gatageagea 1020 gcaagetget eeggggeege agtaaageee eeaagaagaa accatetggg etgeeagete 1080 caccegaagg tgccacteca acgagecetg teggecactt tgccaagtgg teaggeagee 1140 cctgctctcg aaaccgtgaa gaagccgata tgtggaccac cttccgtcca cgaagcagtt 1200 caaatgccag cagtgtcagc acceggetgt ceceettgag gecagagtet gaggtgetgg 1260 cggaggaaat accagcttca gtcagcagtt atgcaggggg tgtccctccc accctcaatg 1320 aaggtctaga gctgttagat gggctcaatc tcacctcttc ccattccctg ctatctcgga 1380 gtggtctctc tggcttctct ttgcagcatc ctggggttac cggcccctta cacacctaca 1440 gcagctccct tttcagccca gcagagggc ccctgtcagc aggagaaggg tgcttctcca 1500 gctcccaggc tctggaggcc ctgctcacct ctgatacgcc accaccccct gctgacgtcc 1560 tcatgaccca ggtagatccc attctgtccc aggctccgac tcttctgttg ctggggggc 1620 ttccttcctc cagtaagctg gccacgggcg tcggcctgtg tcccaagccc ctagaggctc 1680 caggeeccag cagtetggtt eccaecettt etatgatage accaecteca gteatggeaa 1740 gtgcccccat ccccaaggct ctggggactc ctgtgctcac accccctact gaagctgcaa 1800 gccaagacag aatgcctcag gatctagatc ttgatatgta tatggagaac ctggagtgtg 1860 acatggataa catcatcagt gacctcatgg atgagggcga gggactggac ttcaactttg 1920 agccagatcc ctgagtcatg cctggaagct ttgtcccctg cttcagatgt ggagccaggc 1980 gtgttcatat ctactcttta cccttgagcc ctccccagga atttgggacc ctgctttaga 2040 gctagggtgg ggtctggtca cacacaggtg ttgaagaaat tataaagata aagctgcccc 2100 atctggggac gatatgggga gggagatggg aggggaaagg ggagagggtt tttctcactg 2160 tgccaattag ggggtaaggc cccctctcag gagccatcat cggctttccc cattcctacc 2220 cacttaggct ttgtagcaag atgagcaatg ctgttggaaa tgtgaagtca ccagtggcct 2280 tacccctgcc tttgggagca ggattttttt gtagagagtc ttatctgagc tgagccaggc 2340 tagctggagc ctgggatttc tatgcagtgg ccccttaggc cagtgatgtg cggtgggtgg 2400 gctgtttagg ggatctggaa gggccaaggt ctgagcactg gagtggctcg ccaggccaaa 2460 tcacccttag aaggctgcag ataacagaaa ggctttttat aaacttttaa agaaatataa 2520

```
acacaaatat agagattttt taaccatggc agggtgctag tggtgggcag aatgcttttt
                                                                     2580
tttctttctg aaggetttgt gatagtgaca tgatacaaac actacagaca ataaatatta
                                                                     2640
                                                                     2700
ggagacacag ggaagtgggg agagttgggg agtaatagta aacacaggga agagctcccc
tacggaccag gtatagagaa aggtctatgc agaaataggt tagagtttcc ctaacaaaaa
                                                                     2760
agctaaccca ggtcccctca ttccttcaac ttgtgcctgg gagtgtgtgg tgttagggtg
                                                                     2820
                                                                     2880
cagccacact cttctatgac ccagcatggg ttagtgctat ggtgggagag tacattgaag
gcctggaatt agcttggggc cagggaaggg actgggaggg gagagaagag aaggagggaa
                                                                     2940
ggatttagga tggtaaagtt aggtacagag acctccctgt tcaaggcccc tgacagctgt
                                                                     3000
ccctgccctt cttccccttc cctgactgca ggggttatgt ggaagtgtgt gtggcagcag
                                                                     3060
gcagcgggga ggggaggaac agggaagggg gagctgggga gcttggctga gggtctggga
                                                                     3120
aatgagcagg gatgggggg gatgtggatc aggtttacta gcacctgcca gggaggccat
                                                                     3180
etggggetee ttetecacce cagececcaa ageageeett eccecagtge cetttgeate
                                                                     3240
gtcccctccc ccacccctgc tgtgggttcc catcatttcc tgtgtcagcg cctggcctac
                                                                     3300
ccagattgta tcatgtgcta gattggagtg gggaagtgtg tcaaatcaat aaatgaataa
                                                                     3360
attcaataaa tgcctataaa aaaaaaa
                                                                     3387
```

```
<210> 6238
<211> 4005
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (269)...(2438)
<223> similar to gi2217931 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6238 geggeegeee gggeeeggge eegegteggg egeetggete tgtacgegag eeeggggate 60 tgcggccttc gtgcccccc tcccccgccc gccctctcgt ggagcccggc gccggcg 120 getgeeeggg eggggggttg eggegeteag gagaggeeee ggeteegeee egggeetgee 180 240 tggagcggcg gcggcggcgg cggcagcaga aatgatggaa gaattgcata gcctgggacc 300 ecacgaegee aggaattatt ggaggeeagg ttttaetgga ttaggtgtta gtaagggaee 360 acttaatagt gagtcttcca accagagett gtgeagegte ggateettga gtgataaaga 420 agtagagact cccgagaaaa agcagaatga ccagcgaaat cggaaaagaa aagctgaacc 480 atatgaaact agccaaggga aaggcactcc taggggacat aaaattagtg attactttga 540 gcgacgagta gaacagcccc tctatggttt agatggcagt gctgcaaagg aggcaacgga 600 ggagcagtct gctctgccaa ccctcatgtc agtgatgcta gcaaaacctc ggcttgacac 660 agagcagctg gcgcaaaggg gagctggcct ctgcttcact tttgtttcag ctcagcaaaa 720 cagtecetea tetaegggat etggeaacae agageattee tgeageteee aaaaacagat 780 ctccatccag cacagacaga cctcagtccg acctcacaat agaaaaaata tctgcactag 840 aaaacagtaa gaattctgac ttagagaaga aggagggaag aatagatgat ttattaagag 900 ccaactgtga tttgagacgg cagatttgat gaacagcaaa agatgctaga gaaatacaaa 960 ggaacggtta aatagatgtt ttgacaatga gccaagaaac ttccttatag aaaagtcaaa 1020 acaagagaag atggcgtgta gagataagag catgcaagac cgcttgagac tgggccactt 1080 tactactgtc cgacacggag cctcatttac tgaacagtgg acagatggtt atgctttca 1140 gaatcttatc aagcaacagg aaaggataaa ttcacagagg gaagagatag aaagacaacg 1200 gaaaatgtta gcaaagcgga aacctcctgc catgggtcag gcccctcctg caaccaatga 1260 gcagaaacag cggaaaagca agaccaatgg agctgaaaat gaaacgttaa cgttagcaga 1320

```
1380
ataccatgaa caagaagaaa tottcaaact cagattaggt catottaaaa aggaggaagc
                                                                    1440
agagatecag geagagetgg agagaetaga aagggttaga aatetaeata teagggaaet
                                                                    1500
aaaaaggata cataatgaag ataattcaca atttaaagat catccaacgc taaatgacag
atatttgttg ttacatcttt tgggtagagg aggtttcagt gaagtttaca aggcatttga
                                                                    1560
                                                                    1620
tctaacagag caaagatacg tagctgtgaa aattcaccag ttaaataaaa actggagaga
                                                                    1680
tgagaaaaag gagaattacc acaagcatgc atgtagggaa taccggattc ataaagagct
                                                                     1740
ggatcatece agaatagtta agetgtatga ttaettttea etggataetg aetegttttg
                                                                    1800
tacagtatta gaatactgtg agggaaatga tctggacttc tacctgaaac agcacaaatt
                                                                    1860
aatgtcggag aaagaggccc ggtccattat catgcagatt gtgaatgctt taaagtactt
aaatgaaata aaacctccca tcatacacta tgacctcaaa ccaggtaata ttcttttagt
                                                                     1920
aaatggtaca gcgtgtggag agataaaaat tacagatttt ggtctttcga agatcatgga
                                                                    1980
tgatgatagc tacaattcag tggatggcat ggagctaaca tcacaaggtg ctggtactta
                                                                    2040
ttggtattta ccaccggagt gttttgtggt tgggaaagaa ccaccaaaga tctcaaataa
                                                                     2100
                                                                    2160
agttgatgtg tggtcggtgg gtgtgatctt ctatcagtgt ctttatggaa ggaagccttt
tggccataac cagtctcagc aagacatcct acaagagaat acgattctta aagctactga
                                                                    2220
agtgcagttc ccgccaaagc cagtagtaac acctgaagca aaggcgttta ttcgacgatg
                                                                     2280
                                                                    2340
cttggcctac cgaaaggagg accgcattga tgtccagcag ctggcctgtg atccctactt
                                                                     2400
gttgcctcac atccgaaagt cagtctctac aagtagccct gctggagctg ctattgcatc
aacctetggg gegtecaata acagttette taattgagae tgactecaag gecacaaact
                                                                     2460
                                                                     2520
gttcaacaca cacaaagtgg acaaatggcg ttcagcagcg ggtttggaac atagcgaatc
                                                                     2580
cgaatggatc tgatgaaacc tgtaccaggt gcttttattt tcttgctttt ttcccatcca
tagagcatga cagcatcgat teteattgag gagaaacett gggcagetee ggccaggeet
                                                                     2640
                                                                     2700
tgtaggaaaa ggcccgccc gaggttccag cgtcaacggc cactgtgtgt ggctgctctg
                                                                     2760
aqtqaqqaaa aaattaaaaa gaaaaactgg ttccatgtac tgtgaacttg aaaacttgca
                                                                     2820
gactcagggg ggtccctgat gcagtgcttc agatgaagaa tgtggacttg aaaatacaga
                                                                     2880
ctgggctagt ccagtgtcta tatttaaact tgttcttttc ttttaataaa gtttaggtaa
                                                                     2940
catctcctga aaagcttgta gcacaaaggc tcagctgggg atggtgtttg acttcggagg
aaaaaagttg ctattgcccg ttaaaggcac tagagttagt gttttatccc taaataattt
                                                                     3000
caatttttaa aaacatgcag cttccctctc ccctttttta tttttgaaag aatacatttg
                                                                     3060
gtcataaagt gaaacccgta ttagcaagta cgtggcaatg ttcattccaa tcagatgcag
                                                                     3120
ctttctcctc cgtctggtct cctgtttgca attgcttccc tcatctcagt agggaaaaaa
                                                                     3180
attgagtggg agtactgaga tgtgtgggtt tttgccattg gacaaagaat gaggttagaa
                                                                     3240
                                                                     3300
gactgcagct tggagtctct ctaggttttc aactatttct tcacaatttg aacacttgac
ggttgtccct tttaatttat ttgaagtgct attttttaa ataaaggttc atctgtccat
                                                                     3360
gcagtcctct tggattctct gaatgtagta actatgaagc tatgccaaag gtaggcagaa
                                                                     3420
                                                                     3480
aatgggcttg ggagccagac actccaggga tcagtagttc ctacccatag tctttgtgtg
cttgctaaat ggtgtacatt tcttgttaac cacgttatta aaacttgatc agcacataag
                                                                     3540
ctttcttctg ttagatcttt tggcagcaaa caaccttccc cccaaacctc tgaattttgt
                                                                     3600 -
gggtgtgtgg tggtgtgtt ctgtgtgtgc atgtacacac acactttgtc tagctcactt
                                                                     3660
                                                                     3720
taaaagattc atcaaatgga attttaaaaa taatctgaaa agaaatagat atttcaggcc
gggcctggtg gttcatgcct gtaatcccag cactttggga ggccgaggtg ggtggatcac
                                                                     3780
gaggteggga gttegagate agtetggtea acatggtgaa acgccatete tactaaaaat
                                                                     3840
ataaaaatta gcctggcgtg gtggcgtgtg cctctagtcc cagctacccg ggaggctgag
                                                                     3900
gcaggagaat ttctggaacc caggaggcgg aggttgcagt gagccgagat ggcaccactg
                                                                     3960
caatccagcc taggcaacag aatgagactc tgtctcagaa aaaaa
                                                                     4005
```

```
<210> 6239
<211> 1612
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

```
<222> (1)...(1613)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1586)...(981)
<223> similar to gi3850180 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6239
aagctcactc tcgatgtgct caggccctcg cagggttgag gcattgcttt gggggaactg
                                                                    60
tetgtgetee accageetee teaacteeag cagagagtgg aggaatgggt gagtteetge
                                                                   120
ccaggcagct gggggcccca agcaggaaac ctgtgtagaa ccagagacca aaatcctttg
                                                                   180
gaggaacaag gattcatcac atgagaatta ctctcaaagt agagattctg gaggtgcccc
                                                                   240
300
catttattga gcatgcttgt gctaagccct gggctggcct ttgtttcatt ggcacaacaq
                                                                   360
ccttgagagg ttggtccatt atcacccctc agttcaggta agtggactga ggctgagaga
                                                                   420
ggtgcacggg tttgtcaggg tcacatagca catgaggaca gagccagacc aggagccctg
                                                                   480
tgacatecte ggecaggatg ctaacectaa ggacagtgac ggtcactett cacacegetg
                                                                   540
tgaagggaga ggctattgct ctgcacccac agctcagcaa tggggaccat gaacgcctct
                                                                   600
aggcagccca tgtatggggc cgctacctac ctggtaactg tccgcggctg tccatttgga
                                                                   660
agagatattg atgtgtttgt tttctcctcc ccagcctgtg ggctcctgga gccaaaggac
                                                                   720
eccacetaat teateactag geacaaaaca getgeteaat aaatgtttae tgaatgaatg
                                                                   780
aacgcatgaa gaatcaatga aggaggcggt gaaggaatga atgagtcagt ggagaacctg
                                                                   840
aattggttcc tcaagccagc cttccactgc cctgcatgcc ctcggcatct tcggacattt
                                                                   900
cttggcacta ggctgctcct gccacctcac tgccaggggt gatacagggc tgccggcctc
                                                                   960
ttgcaageeg gggaggeeta eggetgtgee gaggeaeggg aacagtgtge tgtacteete
                                                                  1020
ctggaagett aggteettga ateteegeac ggeeaggget geggteagge tecaggtgaa
                                                                  1080
gatggagaaa aaggagaatg gcgatgggcg gcccgggctt gcgtccgtcc cttcgttcag
                                                                  1140
tgggttgtcc ttgggcttgg agacctgcca ctggttggcc aaggtagcaa gaatccccan
                                                                  1200
tgaaccagag gaaagcccaa aaggctgctg ggtggggctc acccgagaca accggatgtc
                                                                  1260
cggacaggac ggcttttctt gcggtccttg acgctgctga tctgcgggaa gtacacgtcc
                                                                  1320
agggccaggt acagcaggca ggtgaggaag gcgagcacgc ccacggccac gccatagctg
                                                                  1380
caggcgttgg ggttgcggtt gtagatgcag aactcctccc cctcggaggc gctgttgagg
                                                                  1440
tagccctcgt tcacgatgga gccgaacacc actatggaga acagctcaca tccgggcctg
                                                                  1500
ctcctccagc tcacccaggc ctctgtgtcc agctgcctat ccatgaagga tcgaattcca
                                                                  1560
gaatcccaaa ctctaaggtc aacatgagac caaggaggca tgcctgctgg tc
                                                                  1612
```

```
<210> 6240
<211> 3176
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (218)...(1791)
<223> similar to gil663700 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6240 gcggccgccc atggagaagg ccaggagagg cggggatggc gtcccccggg ggcccgtact 60 geacategtg gtggteggat tteaceacaa gaagggetge caggttgaat tetettaece 120 gcccctgatt ccaggagatg gacatgacag ccacacttta cctgaagaat ggaagtattt 180 gcccttcctt gccttaccag atggcgcaca caactaccag gaagatactg tgtttttca 240 cttgccaccc agaaatggaa atggagccac agtatttggt atctcttgct atcgaccaaa 300 ttgaagccaa ggcactgaaa gtaaggcaag cagatatcac cagagagact gttcagaaaa 360 gtgtctgtgt tctaagcaag ctgcctctgt atggtttact tcaagcaaaa cttcaactca 420 480 atgaacatat gaatagttcc ttgggaggtg cttcattaga aggatcccaa gtatatcttg 540 gtctgtcacc tcgagatctt gtccttcatt ttcgacacaa gggcttaatc ctatttaagc 600 taattettet tgaaaaaaa gttettttt atatttetee agtgaataaa ttggtgggtg 660 cactgatgac tgtgttatcc ctttttccag gcatgattga acatggtctc agtgactgtt 720 ctcagtatag accccggaaa agtatgtctg aagatggtgg gcttcaggaa agtaacccat 780 gtgcagatga ttttgtttct gcatccactg ctgatgtttc acataccaac ttgggaacta 840 tcaggaaagt catggcagga aaccatggag aagatgctgc catgaagact gaggagcctt 900 tgttccaagt ggaagacagc agcaaagggc aggaacccaa tgataccaat caatatttga 960 aacctccatc tcgcccatct ccagattctt cagaaagtga ctgggaaact ttggatccta 1020 gtgtcttaga ggaccccaac ttgaaagaaa gggaacagct gggatcagac cagacaaatt 1080 tgtttccaaa ggactctgtc ccctcagaga gtcttccaat tactgtacaa cctcaagcta 1140 atacgggaca ggtagtcctg ataccagggc tcatttcggg tttggaagag gatcagtatg 1200 gcatgcccct ggccatcttc acaaagggat atctgtgttt gccttacatg gcattgcagc 1260 agcatcatct teteteegat gteacegtte gggggtttgt tgetggaget actaacatce 1320 tttttcgaca acagaaacac ctcagtgatg ccattgtgga agtagaagaa gctctgatcc 1380 agatecatga tecagaacte aggaagetge ttaacceaac cactgeagae ctaaggtteg 1440 cagactacct agtgaggcac gtgactgaga atcgggatga cgtcttccta gatggcacgg 1500 gctgggaggg aggtgacgaa tggatccggg cccagtttgc ggtctacatt catgccctgc 1560 tggctgccac gctgcaatta gttctgttca gaatagtgaa cgtggcaaaa aaaattggaa 1620 acgtcatggt cacaactaag ccggaatgtt gtacaaacag ggaaaagctg ttggccagtc 1680 agttggagga gctttttccc agtgcaaaga cagcttatgt cttcatggct ttccactttc 1740 accacttcca cctcccaaag tctcactgag ccaccagatg agaagccttg agcaaggcgt 1800 cagaggetge tattgettte tgaggtttaa gtgtcccetg tetgtttggt ggtcccaggg 1860 ttgttactag ccacagatcc ccagcagggg accaaatgtc gaactgttta catggatgtt 1920 gctttaagtg aatgtttcgg gatgccgaaa tgatgaaatc acagccaaag cagggatggc 1980 tttccaggtt ggggtttcaa ttgacaactt ttatttcagt ttgagcctga ttaaaacata 2040 cagtgaacct tctaatgaat tttgagtttt gatattgtac attggtttac tttagaagag 2100 tttttactta tgtaaatttt gttctgtttt ggtgtttgaa tatctagatg gtcactgtaa 2160 tttatacttg ctaaaattaa tttatattac cattttctct aaagttggcc ttaaaacgtg 2220 cttataaagt gaaggggtca tacagttggg ccttcattat tttgctgaat tatgtgatga 2280 tttttttgct ttctacccac aaaacattta ttaattcact tcctcccaga aacatgaaag 2340 ttagaggtgg tagttctgag gattgggtgt tttgttttac gtttttagtt tgttctttcc 2400 acatccttaa aaacttggtt tcagacatca aggagtatca ctgtgctttc ctcctctta 2460 taactgtgca ggtgggtgtg cagagaaata gcagagtgat ggttcgatga tactgaagca 2520 gtttaacatg aatgtgtctg tagggcaata ctttcaaaga agacctatgt gtttattttt 2580 caaccgcagt catgttgcag tcttacaagc acttttttt tattccagag tttgtgccat 2640 ctgtttctct tttttttgg ggggggggg gggcggggtc tcactctatc gcccaggctg 2700 gagtgcagtg gtgccatctc ggctcactgc aacctccatc tcccgggttc aagcaattct 2760 tgtacctcag cctcccaagt agctgggatt atggacatgc gccaccatgc ccggctaagt 2820 ttttgtattt tagtagagac ggggtttcac catgttggcc aggatggtct cgatctcctg 2880 acctcgtgat ccacccaccc cggcctccca aagtgctggg attacaggca tgagccactg 2940 cgcccggcca gctgttattc ttatataagg aatttttccc tcttttttat ttgttatcat 3000 tatggacggc ttcatgggtc ttctaatttg attttgattg actccattcc aggttctttt 3060 ttatatttct ccagtgaata aattggtggg tgcactgatg actgtgttat cccttttcc 3120 aggcatgatt gaacatggtc tcagtgactg ttctcagtat agaccccggt acgaaa 3176

```
<210> 6241
<211> 4450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (120)...(2513)
<223> similar to gi4929268 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6241 gegeactete geaaaaacae aegacegegg aacacetgtt atteagette etteteacag 60 tcctgtggaa gagcgaaagc ccaacctctt tgtcttctct gcgttcacgg agcacacaaa 120 tggaatcaac tcgtgtttca gcttctctcc ccagaagtta ccggaaaact gatacagtca 180 ggttaacatc tgtggtcaca ccaagaccct ttggctctca gacaagggga atctcatcac 240 tccccagatc ttacacgatg gatgatgctt ggaagtataa tggagatatt gaagacatta 300 agagaactcc aaacaatgtg gtcagcaccc ctgcaccaag cccggacgca agccaactgg 360 cttcaagctt atctagccag aaagaggtag cagcaacaga agaagatgtg acaaggctgc 420 cctctcctac atccccttc tcatctcttt cccaagacca ggctgccact tctaaagcca 480 cattgtcttc cacatctggt cttgatttaa tgtctgaatc tggagaaggg gaaatctccc 540 cacaaagaga agtctcaaga tcccaggatc agttcagtga tatgagaatc agcataaacc 600 agacgcctgg gaagagtctt gactttgggt ttacaataaa atgggatatt cctgggatct 660 tegtageate agttgaagea ggtageecag cagaatttte teagetacaa gtagatgatg 720 aaattattgc tattaacaac accaagtttt catataacga ttcaaaagag tgggaggaag 780 ccatggctaa ggctcaagaa actggacacc tagtgatgga tgtgaggcgc tatggaaagg 840 ctggttcacc tgaaacaaag tggattgatg caacttctgg aatttacaac tcagaaaaat 900 cttcaaatct atctgtaaca actgatttct ccgaaagcct tcagagttct aatattgaat 960 ccaaagaaat caatggaatt catgatgaaa gcaatgcttt tgaatcaaaa gcatctgaat 1020 ccatttcttt gaaaaactta aaaaggcgat cacaattttt tgaacaagga agctctgatt 1080 eggtggttee tgatetteea gtteeaacea teagtgeece gagtegetgg gtgtgggate 1140 aagaggagga gcggaagcgg caggagaggt ggcagaagga gcaggaccgc ctactgcagg 1200 aaaaatatca acgtgagcag gagaaactga gggaagagtg gcaaagggcc aaacaggagg 1260 cagagagaga gaattccaag tacttggatg aggaactgat ggtcctaagc tcaaacagca 1320 tgtctctgac cacacgggag ccctctcttg ccacctggga agctacctgg agtgaagggt 1380 1440 aggaagttgt tcatgaggac caaggaaaga agccgcagga tcagcttgtt attgagagag 1500 agaggaaatg ggagcaacag cttcaggaag agcaagagca aaagcgggct tcaggctgag 1560 gctgaggagc agaagcgtcc tgcggaggag caaaagcgcc aggcagagat agagcgggaa 1620 acatcagtca gaatatacca gtacaggagg cctgttgatt cctatgatat accaaagaca 1680 gaagaagcat cttcaggttt tcttcctggt gacaggaata aatccagatc tactactgaa 1740 ctggatgatt actccacaaa taaaaatgga aacaataaat atttagacca aattgggaac 1800 acgacctctt cacagaggag atccaagaaa gaacaagtac catcaggagc agaattggag 1860 aggcaacaaa teetteagga aatgaggaag agaacaceee tteacaatga caacagetgg 1920 atccgacage geagtgeeag tgtcaacaaa gageetgtta gtetteetgg gateatgaga 1980 agaggcgaat ctttagataa cctggactcc ccccgatcca attcttggag acagcctcct 2040 tggctcaatc agcccacagg attctatgct tcttcctctg tgcaagactt tagtcgccca 2100 ccacctcage tggtgtccac atcaaaccgt gcctacatge ggaaccccte ctccagegtg 2160 ccccacctt cagctggctc cgtgaagacc tccaccacag gtgtggccac cacacagtcc 2220 cccaccccga gaagccattc cccttcagct tcacagtcag gctctcagct gcgtaacagg 2280

```
tcagtcagtg ggaagcgcat atgctcctac tgcaataaca ttctgggcaa aggagccgcc
                                                                     2340
atgateateg agtecetggg tetttgttat catttgeatt gttttaagtg tgttgeetgt
                                                                     2400
gagtgtgacc teggaggete tteeteagga getgaagtea ggateagaaa ceaceaactg
                                                                     2460
tactgcaacg actgctatct cagattcaaa tctggacggc caaccgccat gtgatgtaag
                                                                     2520
cctccatacg aaagcactgt tgcagataga agaagaggtg gttgctgctc atqtaqatct
                                                                     2580
ataaatatgt gttgtatgtc ttttttgctt ttttttaaa aaaaagaata actttttttg
                                                                     2640
cctctttaga ttacatagaa gcattgtagt cttggtagaa ccagtatttt tgttgtttat
                                                                     2700
ttataaggta attgtgtgtg gggaaaagtg cagtatttac ctgttgaatt caqcatcttg
                                                                     2760
agagcacaag ggaaaaaata agaacctacg aatatttttg aggcagataa tqatctaqtt
                                                                     2820
tgactttcta gttagtggtg ttttgaagag ggtattttat tqttttttaa aaaaaqqttc
                                                                     2880
ttaaacatta tttgaaatag ttaatataaa tacataattg catttgctct gtttattgta
                                                                     2940
atgtattcta aattaatgca gaaccatatg gaaaatttca ttaaaatcta tccccaaatg
                                                                     3000
tgctttctgt atccttcctt ctacctatta ttctgatttt taaaaatgca gttaatgtac
                                                                     3060
catttatttg cttgatgaag ggagctctat tttctttacc agaaatqttq ctaaqtaatt
                                                                     3120
cccaatagaa agctgcttat tttcattaat gaaaaataac catggtttgt atactagaag
                                                                     3180
tettetteag aaactggtga geetttetgt teaattgeat ttgtaaataa aettgetgat
                                                                     3240
gcatttaacg agtgggtcgt cttttctta ggtgtatgtg tctgacctca ggccttttag
                                                                     3300
ccatatttca gtatgtggcc ttttttgatg ttatgtttta tccagtagct ttactaaggt
                                                                     3360
ataattgatg taataaactg catatattta aagtgtatac tttgacaaat tttgacatgg
                                                                     3420
tgtatacctt cgaaactatg ccacagtctg gatgtgttta ctgaaacatt ttaataagga
                                                                     3480
agtttatttt tgataaagtt atgtttttgg atacaatata tttgtatggt gagagtgatg
                                                                     3540
aattgttgga tcatttgaat aaaatctttt actaacccca tgataaaagg agaagacaac
                                                                     3600
agtgagetta gaatatetat aaageaaaaa atgtagtete ttgtttaaaa aatetggage
                                                                     3660
gggaatgcaa ggatacaaaa ctttagcatg ctttgagcaa aaatttaaac ttactqqaat
                                                                    3720
cttttataat aatgtaagtg gaatggagga ttctaggaac tgagaactgt attggaatag
                                                                    3780
gttcaaaata tgtaagaaat gctaatgtgg gagataaaaa ttttatttag tacttattct
                                                                    3840
gattattatt aaagtaaata atgtgttcct tgaggataac ttgtcaaatg ccccccaaag
                                                                    3900
ccataaagaa tataattttg aatccccaaa ttcccaaaga caagaactct gtgtttgaat
                                                                    3960
tcattctgca tataattatt tataagtata gattgtgaat ttttccatgt tcttaaaatt
                                                                    4020
atttttatct tttttcatgg ttgccatagt gctcccattg tttggccttg gtaatattta
                                                                    4080
gttgataatt ccattactgt gtatttttca cttgtttcta agatcaaaca ttttaatatg
                                                                    4140
tgcatgttat atataaatat gtaaattctg tgatactcta tgatcatctc tttctttata
                                                                    4200
ttattttcat agacatggaa atagttggct cagagattat ggcattttaa ggacactcat
                                                                    4260
agtatatatt ggccaaagtg ggttttccag aaaggcactg ctggcttcga ctcctataag
                                                                    4320
cagcacgtgg gcttgttcat ctcactgcat gtttatgaag atacagttct tttgccttgt
                                                                    4380
tetetgeetg atgtgtatge agaggeagee etcaatatge agtggttgaa taaatgaatg
                                                                    4440
aagaaaccac
                                                                    4450
```

```
<210> 6242
<211> 2477
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (300)...(1807)
<223> similar to gi3930776 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6242

```
gaggccgcag ctcccgatgg aaatcatatt atgtagaata cttgggtgac atctgcctga
                                                                       60
gagateteca agaattacag attgagtete getetgttge ecaggetgga gegeagtggt
                                                                      120
gcaatetetg cteaetgeaa ceteegtete eegagtteaa geagttetee tgeeteagee
                                                                      180
teetgagtag etgggattae agaagacaaa aatactaatg catttgagaa ageggtagtt
                                                                      240
ttggggggag ggggaaaaag caactgcttt cctgatctgc aacttggctg gatgctaaga
                                                                      300
tgtcagtgga catgaatagc caggggtctg acagcaatga agaggactat gacccaaatt
                                                                      360
gtgaggaaga ggaagaagaa gaagaagacg accetgggga catagaggac tattacttgg
                                                                      420
gagtagccag cgatgtggag cagcaggggg ctgatgcctt tgatcccgag gagtaccagt
                                                                      480
teacttgett gacctacaag gaatetgagg gtgeeetcaa tgagcacatg accagettag
                                                                      540
cttctgtcct aaaggtatct cattcagttg ctaaacttat attagttaat ttccactggc
                                                                      600
aagtttcaga gatattggac agatacaagt ccaattctgc tcaactgctt gttgaggctc
                                                                      660
gagttcagcc taatccatca aaacatgttc ccacatccca tccccctcac cactgtgcag
                                                                      720
tgtgtatgca gtttgtgcga aaggaaaacc tactctctct ggcctgtcag caccagtttt
                                                                      780
geegeagetg etgggageag caetgeteag ttetegteaa ggaeggegtg ggegtgggag
                                                                      840
tctcttgcat ggctcaggac tgtccactcc gtacaccaga ggactttgtg tttccattgc
                                                                      900
ttcccaatga agaattgaga gagaaataca ggcgctacct cttcagggac tatgtggaga
                                                                      960
gtcattacca gctccagctg tgccctggtg cagactgccc catggttatt cgggtacagg
                                                                     1020
agcctagagc tcgccgagta cagtgcaatc ggtgcaacga ggtcttctgt ttcaagtgtc
                                                                     1080
gtcagatgta tcacgcaccc acagactgtg ccacaatccg gaaatggctc acgaagtgtg
                                                                     1140
cagacgactc tgaaacagcc aactacatta gtgctcacac taaagactgt cccaagtgca
                                                                     1200
acatetgeat tgagaagaat ggaggetgea ateacatgea atgeteeaaa tgtaaacaeg
                                                                     1260
acttetgetg gatgtgteta ggagattgga agaeteatgg eagtgaatae tatgagtgea
                                                                     1320
gtcgttacaa ggagaatcct gacatcgtga accagagcca acaagcccag gcgagggaag
                                                                     1380
ccctcaagaa gtacttattc tactttgaga ggtgggaaaa ccacaataaa agcttgcagc
                                                                     1440
tagaggcaca gacataccag cggattcacg agaagattca ggaqaqqqtc atqaacaatc
                                                                     1500
tggggacatg gatcgactgg cagtacctac agaatgctgc caagctcttg gccaaggttc
                                                                     1560
ettetettet eteetgttge agtgtegata caccetgeaa tacacetace catatgeata
                                                                     1620
ttacatggag tccggaccca ggaagaagct gtttgaatac cagcaggctc agctggaggc
                                                                     1680
tgagatcgaa aacctctcat ggaaagtgga gcgtgcagac agctatgaca gaggggactt
                                                                     1740
ggagaaccag atgcatatag cggagcagcg gaggagaacc ctgctgaaag atttccatga
                                                                     1800
cacctaagtt gggatgtgga tgtgccgggg tgaggaagat gtggctgcaa ggtctcccgg
                                                                     1860
ctgccatact gcatgctgca ggctctgcct ttcatgaccc caggcaacag ccagggcccc
                                                                     1920
actectgaga gacactggca acacetetta gttgatttet gttttettet etttteaett
                                                                     1980
tttgtttcta ccagggtaga ggccatgttg aactggcctc ttttcaggac ttttatttcc
                                                                     2040
ccctggatgg ttgttgggag ggagggaaag tgttttctga atggctatta atagtattag
                                                                     2100
atcattacaa cttatgtaac tttcaaaggt tgtacaatta tacaaaaaaa aaaaaagggg
                                                                     2160
caccttttgg aaaaccacag ccccttttt aaaaaaaaat gggattgggg gggttaaccc
                                                                     2220
ctcaaccggt ttaattaaaa aggaaaaata ggcggccacc ccccctaaaa atgtttttcc
                                                                     2280
tgaaaaaggc cccgggccct tttttttcaa tattcccgtg ggcccaaagt ggaaccccaa
                                                                     2340
aaaaaaacct ggggggcaaa atggtaggaa atgaaacggc cctgggaaag ggccttgaac
                                                                     2400
caaagggggt cacaaaaggc ctcctgcttt accggggaaa ccggagacag ccaaaaaatg
                                                                     2460
gtttttttgc acagggg
                                                                     2477
```

```
<210> 6243
<211> 2143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (603)...(1439)
<223> similar to gi5911844 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6243
                                                                     60
egeagegtee egecageeag etecttgeae cettegegge egaggegete cetggtgete
cccgcgcagc catggctcag cacttctccc tggccgcctg cgacgtggtc ggattcgacc
                                                                    120
                                                                    180
tggaccacac tetgtgtege tacaacetge cegagagege eccepteatt tataataget
ttgcccagtt cctagttaag gagaaagggt acgataagga attgctcaat gtgaccccag
                                                                    240
aggattggga tttctgttgc aaaggtttgg cattggatct agaagatggg aacttcctta
                                                                    300
aacttgcaaa taatggcact gttctcaggg caagccatgg caccaagatg atgactccag
                                                                    360
aggtgctggc agaggcatat ggcaagaaag agtggaagca cttcttgtcg gacactggaa
                                                                    420
tggcttgccg ctcaggaaag tattactttt acgacaacta ctttgacctg ccaggagctc
                                                                    480
                                                                    540
ttctgtgtgc cagggtggtg gactatttaa caaaactgaa caatggtcaa aaaacatttg
atttttggaa ggatatagtt gctqctatac aacacaatta taaaatqtca qcttttaaqq
                                                                    600
aaaactgtgg aatatatttt ccagaaataa aaagagatcc aggcagatat ttacatagtt
                                                                    660
                                                                    720
gtcctgaatc tgtgaaaaaa tggcttcgac agctaaagaa tgctgggaaa attcttctgt
taattaccag ttctcacagt gattactgta gacttctctg cgccatatat tcttgggaat
                                                                    780
gattttacag acctttttga cattgtgatt acaaatgcat tgaagcctgg tttcttctcc
                                                                    840
cacttaccaa gtcagagacc tttccggaca ctcgagaatg atgaggagca ggaggcactg
                                                                    900
ccatctctgg ataaacctgg ctggtactcc caagggaacg ctgtccacct ctatgaactt
                                                                    960
ctgaagaaaa tgactggcaa acctgaaccc aaggttgttt attttggtga cagcatgcat
                                                                   1020
teagatattt teecageteg teactatagt aattgggaga cagteeteat eetggaagaa
                                                                   1080
ctcagagggg atgaaggcac gaggagtcag aggcctgagg agtcagagcc tctagagaag
                                                                   1140
aaaggaaaat atgagggacc aaaagcaaaa cctttaaata cttcatctaa aaaatggggc
                                                                   1200
tcttttttta ttgattcagt tttgggactg gaaaatacag aagactcctt ggtttataca
                                                                   1260
tggtcttgta agagaatcag tacttacagc actattgcaa ttccaagtat tgaagcaatc
                                                                   1320
gcagaattac ctctggacta caaatttaca agattctctt caagcaattc aaaaacagct
                                                                   1380
ggctactatc caaatcctcc actggtctta tcaagtgatg agacactgat atccaaataa
                                                                   1440
gttgtcttta ctgaaaaatg aagtgaagac ccatatatgc agttaaaaaa aagttaattt
                                                                   1500
tcaaaaaata ctgtaaaaga ctttaaggaa caagttttat tgaccaataa gttgatattt
                                                                   1560
gtccataggt ctcctttcta taaatcatct tgatgtttaa caactcttat tatattaaaa
                                                                   1620
tctcagtatc ctaaaactta gaaccttatt gatattttct atacagtagt tttgtgatta
                                                                   1680
gaattcacct ggggacacac actcacacgc acagtcactc ttacacatat gcctagtcca
                                                                   1740
1800
gcatatttgc aggccccacg caaaacctgc tgaatcagaa gctctgagag taaggcctgc
                                                                   1860
caatctggtt taacaagccc gtcaggtgat tctgatttac agtacagttt gagacccact
                                                                   1920
ggctagaaca tatcctccag agacttggct taattggtct gggtaaatat ggctgagcgt
                                                                   1980
tgttatcttt tgttatcttt tatatgccct aggaaagtac aaccagaatt gaaaaccaac
                                                                   2040
tgatctatac cagttettte aattaatagt caagaacatt gagtecagtg agattaagtg
                                                                   2100
atttttgcag gctatgaggt tttatgctat tcctgtgttc tcc
                                                                   2143
```

```
<210> 6244
<211> 1802
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (140)...(1562)

<223> similar to gi386836 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6244
aaacaaacaa aaaggaacca gaggccactt gtatatatag gtctcttcag catttattgg
                                                                       60
gggcagaaga ggaagatttc tgaagagtgc agctgcctga accgagccct gccgaacagc
                                                                      120
tgagaattgc actgcaacca tgagtgagaa caataagaat tccttggaga gcagcctacg
                                                                      180
gcaactaaaa tgccatttca cctggaactt gatggaggga gaaaactcct tggatgattt
                                                                      240
tgaagacaaa gtattttacc ggactgagtt tcagaatcgt gaattcaaag ccacaatgtg
                                                                      300
caacctactg gcctatctaa agcacctcaa agggcaaaac gaggcagccc tggaatgctt
                                                                      360
acgtaaagct gaagagttaa tccagcaaga gcatgctgac caggcagaaa tcagaagtct
                                                                      420
ggtcacctgg ggaaactatg cctgggtcta ctatcacatg ggccgactct cagacgttca
                                                                      480
gatttatgta gacaaggtga aacatgtctg tgagaagttt tccagtccct atagaattga
                                                                      540
gagtccagag cttgactgtg aggaagggtg gacacggtta aagtgtggag gaaaccaaaa
                                                                      600
tgaaagagcg aaggtgtgct ttgagaaggc tctggaaaag aagccaaaga acccagaatt
                                                                      660
cacctetgga etggcaatag caagetaceg tetggacaac tggccaccat etcagaacge
                                                                      720
cattgaccct ctgaggcaag ccattcggct gaatcctgac aaccagtacc ttaaagtcct
                                                                      780
cctggctctg aagcttcata agatgcgtga agaaggtgaa gaggaaggtg aaggagagaa
                                                                      840
gtttagttga agaagcettg gagaaagcee caggttgtaa cagatgtaet tegeagtgea
                                                                      900
gcccaagttt tatcgaggaa aggatgagcc agacaaagcg attgaactgc ttaaaaaqqc
                                                                      960
tttagaatac ataccaaaac aatgcctacc tgcattgcca aattgggtgc tgctataggg
                                                                     1020
caaaagtett ecaagtaatg aatetaagag agaatggaat gtatgggaaa agaaagttae
                                                                     1080
tggaactaat aggacacgct gtggctcatc tgaagaaagc tgatgaggcc aatgataatc
                                                                     1140
tetteegtgt etgtteeatt ettgeeagee teeatgetet ageagateag tatgaagaeg
                                                                     1200
cagagtatta cttccaaaag gaattcagta aagagcttac tcctgtagcg aaacaactgc
                                                                     1260
tccatctgcg gtatggcaac tttcagctgt accaaatgaa gtgtgaagac aaggccatcc
                                                                     1320
accactttat agagggtgta aaaataaacc agaaatcaag ggagaaagaa aagatgaaag
                                                                     1380
acaaactgca aaaaattgcc aaaatgcgac tttctaaaaa tggagcagat tctgaggctt
                                                                     1440
tgcatgtctt ggcattcctt caggagctga atgaaaaaat gcaacaagca gatgaagact
                                                                     1500
ctgagagggg tttggagtct ggaagcctca tcccttcagc atcaagctgg aatggggaat
                                                                     1560
gaagaataga gatgtggtgc ccactaggct actgctgaaa gggagctgaa attcctccac
                                                                     1620
caagttggta ttcaaaatat gtaatgactg gtatggcaaa agattggact aagacactgg
                                                                     1680
ccataccact ggacagggtt atgttaacac ctgaattgct gggtcttgag agaqcccaag
                                                                     1740
gagttctggg agagggacca gattgggggg taggtccacg ggcttggtga tagacatatt
                                                                     1800
tc
                                                                     1802
```

```
<210> 6245
<211> 2614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2615)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (251)...(1039)
<223> similar to gi29604 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6245 60 agegggaact gaaacetgat taeggteega eeggeeegga tteeeggteg acceaegegt ecgeceaege gtneggaact etggaggaac getgagetga geageaeega ggacagegee 120 eggeagegee egegeeeagg teteceteeg eagecetgae tegegeaeae getgagettt 180 240 tgctcactcc cettcgcgcg gacacagaca cacgcatatt cacacaccca gacacacacc ccgctgtaca atggcagaat cccacctgca gtcatccctc atcacagcct cacagttttt 300 cgagatctgg ctccatttcg acgctgacgg aagtggttac ctggaaggaa aggagctgca 360 gaacttgatc caggagetcc agcaggegeg aaagaagget ggattggagt tatcacetga 420 aatgaaaact tttgtggatc agtatgggca aagagatgat ggaaaaatag gaattgtaga 480 gttggctcac gtattaccca cagaagagaa tttcctgctg ctcttccgat gccagcagct 540 gaagteetgt gagggaatte atgaagaeat ggagaaaata tgataetgae cacagtgget 600 tcatagaaac tgaggagctt aagaactttc taaaggacct gctagaaaaa gcaaacaaga 660 ctgttgatga cacaaaatta gccgagtata cagacctaat gctgaaacta tttgattcaa 720 ataatgatgg gaagctggaa ttaactgaga tggccaggtt actaccagtg caggagaatt 780 ttcttcttaa attccaggga atcaaaatgt gtgggaaaga gttcaataag gcttttgagc 840 tgtatgatca ggacggcaat ggatacatag atgaaaatga actggatgct ttactgaagg 900 atctgtgcga gaagaataaa caggatctgg atattaataa tattacaaca tacaagaaga 960 acataatggc tttgtcggat ggagggaagc tgtaccgaac ggatcttgct cttattctct 1020 gtgctgggga taactagagt tggtggccgc aaccacttgc tagtgataca ctgtatctaa 1080 aaaataactg tgcactataa gggagtaggc tgtattttct tttatatctg taaatttaac 1140 tgcatataga taattatcca ggatgtgtgg ctcattcttt tcagcttgtt tctatactgt 1200 ttgtaatata cagtttttgt aaccatatga ttgaaaagaa gaaagtctat gcttaggcca 1260 gtcagtacac ccaattttaa aaaataacat attcttgctt tcacaaatat agttgaacaa 1320 gatttcccta aaaattccac caggattaat ctctaaaatt ctagtctctg atttgcaaat 1380 gcacatttgt cactgaataa tggaattatg tataacaagc caaacattct tattttaqac 1440 aaccatagaa ctgtcccaca aaatatttct aagcttattt ctaactatta ggaggaatgt 1500 gcttttccat ctaaaatact caccaaaata tagttaattg tggctttatg aagttaacag 1560 teteattaca gatttagttt accaatcaac ageatgteta etgettggat ecatacaaaa 1620 ctatcggttc aagttgatgt gacaagggaa gggagcacca gatgacacat aaatctgtct 1680 gattctatgc ctgtatttcc aacaactta ctgtcagaga atatgaccta aatccatttt 1740 ctaaactgtt ttcatgtgtt gcaaattatt ctagtcaact gctgttttat gtcatactct 1800 gtgtaatete tgattaaatt taatataetg catateetgg tgtetagttt geataettee 1860 tggattttct ttctatgtag aactgttcat ttccaccaag ggtatctgct gcctctgaaa 1920 atattttttt ctagctataa caactctatt ttttactaca taattaaatt ttaatgtaaa 1980 attcatagca tcctgattat tgaatgttat atcatcaata cttttgtgta ttctgtggat 2040 tctatatttc atattgagat cagcattcaa aatagttcta tttctatctg caaatagttt 2100 2160 tagcaagaag attctaaaac attctttaac atacatctaa qtcaqtttca catatttqta 2220 gctagaatat cctatactgg ttatagttga tatgtaacag ttggtgattt tagatttctt 2280 tgattgtgaa acagggaget atgagagatg tgtccatgtg aaatttacag ttactgccta 2340 ggagttaatg atcgttctgg gtcagcttga atgtccccat tctataaatt caacacttat 2400 tttctgaatt cataaaaata accaaaaaat gtgagctata atgtttccct caagaacaaa 2460 cagaaacgag atttgccaaa aactaaaatt caacaaatga tgttgagtgg gagattggct 2520 ttgcctttag gcgtgtaaat ggaagcactg ccattagact gaatttaact actaagaata 2580 aataaagaag aaaataacct taaaaaaaaa aaaa 2614

```
<210> 6246
```

<211> 5623

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (5510)...(934)
<223> similar to gi2370149 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6246 ttttttgata tttaatgatg tagcttctaa atttggtagt tctgtctttg agtgtgaact 60 120 taaaaattat gaagatgegg etgggegegg gggeteacae etgteateea ggeactttgg 180 gactacaggc atgagccact gcatctggca gcaacatata tttcaaaaga gtagcctggc cactaggatc tacctaccta catttttggt gcaaactatt actttgggga catctttctt 240 ttttcctttt ctttttttt tttttaattt acagatgggg tcttgttatg tttcccaaga 300 ggctcaagtg cagtggctat tcacaggcat gatcatagca cactatagcc ttgaactcct 360 420 ggcctcaagt gatcttccca catagctgag acaacaggta catgccactg tgcccagcag gacatttttc ttaatagaaa actactatcg tgaagaatta tgtttatctc ttaactatgt 480 ctactcaact agtttcaaca tagtagtgaa attaacagta tcacgaaaag caatgttcca 540 tgttaatttc catgtcgaag caatgttctt tgacccaaca tttggataaa tctcattctt 600 gatgctagct atttcttggg gtatgggttg ctttaatcaa cctctgcaaa actccgatct 660 tagtaattcc aagtgaaaga accttgctag ttgttcttac tctgtacaga aatatatcag 720 tctggattga ttggacttgg agttctatct tgatatgaca attttttctg gtaagacctt 780 gctcagaaat atgacccatg ttgtcaaatt ttcataaata tcttattttt aqaaatccca 840 tcactacttt acattaggct ttctctttca gtgttcacag gcatcagagc tctggatgaa 900 aaaggcagat cccaactccc acagcacgtc tttaccgttt cccaacgatg ctcaggccca 960 ggccccggcc agctttcttc tgcagatcca cagggaaaat ctccaagttc tcctcatccc 1020 ggtagtgtgc ctcatctcta tacaccacca gccgcacctt ctggggggtc tgcctcaggg 1080 ctgtgatggc ttcttcgtgg ctggagttcc tcaggtcaac cccattaacc aagggtgtgt 1140 cttttcctcc cacaatgctg agaccaagcc ctgaacgtct cttggatatt tctataatca 1200 tttcctgtcc agggacaatg ggacacgttg cggggtccac tgacagagga gcctggaaac 1260 caccatagcc tgtgaagtct gcatctgttg aatggtatga tgaagctggt gctaatggta 1320 tetettgtga actgaaggag acttttgttg gatatttttg etgttteate tggetgaeag 1380 ccagtttgaa gctttcactt tcaggcaatt gtttaatacc aaccttcgag gctgccatcg 1440 ttcctcacta ctaataggtt cggtgccgct ctgatcctca atagaagatg gagaacttga 1500 tggcactgga aagggagtaa cggccatctg attgactgca tcctcgtttc tgatgaaaac 1560 cagcttgact tttgatgggg cagtcttaat aatggcagat gcgattttgg tgacttcttc 1620 catacagaat ctgattgttt atctctaaga gttcatctcc aatatgcatt cgtccatctg 1680 cggcagcagg tccttccggg ttaattccca ccacaaatat gctcatgcgt gatcggtctt 1740 tattaccage aaggetgagt ccaagtecat tettatettt tteaagttea ataatgtgea 1800 gttctccagg cagatctgca tatctttgtc tgattttttg gtcggtaaag gcatcttctt 1860 cttcattttc atcactgtca tcagtcagag ctttataagg aggaggaagt ttcattggcg 1920 gtggagcagt teettgeete ttttetttet tttettgggt gteetggtte tggttacegg 1980 tgattttgtt ggccttgtta tgtacgttag gaatgactcg tggagtggat gacaaactct 2040 gaacaatgaa caccacaggg tttcctgcat tcttaatggc ctcaactgct tcgctgtgtg 2100 aggcattetg caaatetact ccagacacet caagtatttt atetecagtt ttaagtgegt 2160 tegtetteec tgetggaetg tettetaaaa ettgtttgat gaatataeet ttaageteet 2220 ctccattctt tagacgtttt ataacagttt gtccaccaac aatactgatc ccaagagaca 2280 cattgggttc tctaaaaatc tcaacaattc tcggtggacc ccagtggcta aaatttggag 2340 tttcttctcc ttcgccttct tctctctcag gtaactcaca tgtatcagtg gcatatctag 2400 aagacaacat teetgtgtat getgaggeet tggaaataac tegtgteget tggtgttgat 2460 ataaaggcaa atcttcttgc tcccttcttt gagccacaac aggaaggtca atgagcaagc 2520 taggaccttg gacatcattc gggatcatgc ctaaatccag actagttttt gctaatgaat 2580 taagattttc caggtcgtca aatctgcctt gttgactgtt tccttcagtt gatggtacag 2640 atggtaggga ctccatgaca aaattttctt tcatcacatt ttcagggcaa tagccatacq 2700 gctgtgcctc ctgggaatag acagtcctcc cggttcttgc ctcttgagac tcggatggtt 2760 cattatcatg caaccactgt gtaccaaagt gaagttcatt cacagagggc acaggagtgg 2820

```
2880
cctcttgaat qtgcgacaag ggatacaact ccatggatgg tgagggatct tgatataact
                                                                     2940
catattette ateaacaage atttetett etteateeat tteetgeaat etaggagtea
gaaattcatg catctcccag gcctccttgc tttgctctat ctctttttgt tgggaatgga
                                                                     3000
aagactttcc cagatctaga aatggttcat ccacaagttc ttctttaaaa tatggttcat
                                                                     3060
ctctaaatcc cttgggtgct tcgagtatta aagatgaatt tatatcatga attgttcctg
                                                                     3120
aaaattcagt cttgtcttca ttactgcttg aatgtaaaat ataacaactt tcttcttcat
                                                                     3180
                                                                     3240
tatetteeae caaaggetta cagatgeeaa ggtgtaetag geetggtgge acagetttea
                                                                     3300
atatttccac agettcagca agtgaggtgt tgtccaaacg gtattcattg actgagacca
ggcggtctcc aggtaatagt cccccacttc tttctgctac accatctgct accagggagc
                                                                     3360
                                                                     3420
ggatcacaat cactgatctt gtaggatcta aagggtcctg gtaatccaaa atgctgaatc
ccaaaccttt acaatctttt actagttcaa caatcttgac ttcaggggac cacagtgcta
                                                                     3480
attocccatc atcatcttct tcagtattga catccatatt gtggtcaacc tctgtctcag
                                                                     3540
gaagagaggt ttcagtgcgc cttggttcat ctacagaagc ttcatcatca aacaacctcc
                                                                     3600
                                                                     3660
gacagcaaac caaagtaaaa gggggtggca cttctttaag aaaggagact gcttctcggc
                                                                     3720
gagattttcc ataaagctgc atgccattga cctcaagcag ctcatcttct ggctgtagga
gacccaatgt atcaacagga ccaccagaaa caattgaaga aatataatgg tgcccatcaa
                                                                     3780
aggaatccac ttccacacca agcctcagag tgtgaatagg cagcagcttt gaatatttct
                                                                     3840
gtaactcagc atcatctgca atctgtgtgt ccaaagtagc aaccattact tcataatcag
                                                                     3900
gacccaacag gttttcccat ctggatttca gctcattttc tggagagtct gggacttttt
                                                                     3960
ccaatttttc taaggcttgt atgttgtcat tttttaaagt atcaattctt tctttaattt
                                                                     4020
ceteatette accatecaca ttagttteag tttecaetge tecagttaga aagagagetg
                                                                     4080
gtggtttcag tggttctaca acagttcctc tgtctgaagg tggttcaagt ggagaagtag
                                                                     4140
atgaggatgt cttccttcga actagggtta ggtgtaccac ctgccctgca tttcgtaata
                                                                     4200
cttcaacaac atcatggttg gcaaaaccct gaatgttcac gccatcgaca gcaactattt
                                                                     4260
tgtcattcac ttgaatgtgg ccattgtggt acgcagcact gccaggtatt atacttttca
                                                                     4320
cataaatccc tgaagcttcc cctgtatgag atgttccaac atagccaaca attctaattc
                                                                     4380
caagactctg cccatctttt ctcacaagct caacattata agtttcaaaa agagaactgt
                                                                     4440
cagaaccagg gcccttgctg gctacagtag gcagggcaac aggtaaggct gcaggggcag
                                                                     4500
ggggggtgac tgaaatgtca ccagctggat ctctagcaac gagcatcctg actgaattcc
                                                                     4560
cacagiteet tagaacitgt geaacitget caciggical teecigeacg titgigecae
                                                                     4620
caatcttcaa gatgtggtcc cctgtctgga gtcttccatc tcgatctgct aatcctccag
                                                                     4680
gaactatagt cctcacaacc acgccacttg tttttcctcc aactattcca aaacctagtc
                                                                     4740
cagagecate attaatgage teaacetett caacatggee ecaacaaact gttteaggea
                                                                     4800
gagttgtatc atttaggctg ctagaagtac tgctttttgt gtggactggt tccctggcca
                                                                     4860
caatcagtct caaagatcca gtggtttgtt gtaataatgc aattgcttgc tgatgggaaa
                                                                     4920
tgttctgatc caatggcgtg tgattaatgg ccaatatttg atcattttcc tttaatcttt
                                                                     4980
gatecetgte tgetacacte cetggetgga catectteae gaagatatea aetttteega
                                                                     5040
gattttgact tctgagggcc accacactga atccaaggcc tccagttgaa ggccqttcta
                                                                     5100
tatetatata tteaatttge eggeeetgag ceatetgttg aatgaetgag ttaaagtett
                                                                     5160
catttcccaa cttcggggtc cacggaaata acccagatac agtcgagtta ttagagggcc
                                                                     5220
tgtggacatt tccattagta atggaaccat ctgtgaacac taacaaacct ttcctagaaa
                                                                     5280
aatcaaagtt ggctgaacaa tctgagggta tatggttgag ttgacccttc agttgcttga
                                                                     5340
tggactgctg aagtgtgagt atctggttga agagaggact ctttagtgtc tcataaaaca
                                                                     5400
tagataactt ctcattctgc gacgtgtcac ccttctcctg caatttcatt ttcaggcgat
                                                                     5460
caagtacctg cagcacctgc agtttatctg tagcaggatt ttcaggcatt ttgaattatt
                                                                     5520
ctcttcaatc actcttaaag acacctggtg cgctggagga gcaggtggga gcccgggtcg
                                                                     5580
ggcgggctcg gtgtcggccc tgcctcacct gggcggaagt gag
                                                                     5623
```

<210> 6247

<211> 1915

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (107)...(1555)
<223> similar to gil655598 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6247
                                                                      60
atccagecte aggaactgee eccagecate gageettgge taettaaggg acetgggeee
aatccacage tgggacagte etggeecact geactgggaa tetaggatgg gggeettgge
                                                                     120
cagageeetg cegteeatac tgetggeatt getgettacg tecaceccag aggetetggg
                                                                     180
                                                                     240
tqccaacccc ggcttggtcg ccaggatcac cgacaaggga ctgcagtatg cggcccagga
                                                                     300
qqqqctattq qctctqcaga gtgagctgct caggatcacg ctgcctgact tcaccgggga
cttgaggatc ccccacgtcg gccgtgggcg ctatgagttc cacagcctga acatccacag
                                                                     360
                                                                     420
ctqtqaqctq cttcactctq cqctqaqqcc tgtccctggc cagggcctga gtctcagcat
ctccgactcc tccatccggg tccagggcag gtggaaggtg cgcaagtcat tcttcaaact
                                                                     480
                                                                     540
acagggetee tttgatgtea gtgteaaggg cateageatt teggteaace teetgttggg
                                                                     600
cagegagtee teegggagge ceacaggtta etgeeteeag etgeageagt gacategetg
acgtggaggt ggacatgtcg ggagacttgg ggtggctgtt gaacctcttc cacaaccaga
                                                                     660
                                                                     720
ttgagtccaa gttccagaaa gtactggaga gcaggatttg cgaaatgatc cagaaatcag
                                                                     780
tgtcctccga tctacagcct tatctccaaa ctctgccagt tacaacagag attgacagtt
                                                                     840
tegeegacat tgattatage ttagtggaag ecceteggge aacageecag atgetggagg
                                                                     900
tgatgtttaa gggtgaaatc tttcatcgta accaccgttc tccagttacc ctccttgctg
cagtcatgag ccttcctgag gaacacaaca aaatggtcta ctttgccatc tcggattatg
                                                                     960
tetteaacae ggecageetg gtttateatg aggaaggata tetgaactte tecateacag
                                                                     1020
atgacatgat accepting totalatatic gattgaccat calagratic egaccetteg
                                                                     1080
teccaeqqtt aqecaqqete taccecaaca tgaacetgga actecaggga teagtgeeet
                                                                    1140
                                                                    1200
ctgctccgct cctgaacttc agccctggga atctgtctgt ggacccctat atggagatag
atgeetttgt geteetgeee ageteeagea aggageetgt etteeggete agtgtggeea
                                                                     1260
ctaatgtgtc cgccaccttg accttcaata ccagcaagat cactgggttc ctgaagccag
                                                                    1320
qaaaqqtaaa agtgqaactg aaagaatcca aagttggact attcaatgca gagctgttgg
                                                                     1380
aagegeteet caactattac ateettaaca cettetaece caagtteaat gataagttgg
                                                                     1440
ccgaaggett ccccetteet etgetgaage gtgtteaget etacgacett gggetgeaga
                                                                     1500
tccataagga cttcctgttc ttgggtgcca atgtccaata catgagagtt tgaggacaag
                                                                     1560
aaagatgaag cttggaggtc acagctggat ctgcttgttg catttccagc tgtgcagcac
                                                                     1620
gtctcagaga ttcttgaaga atgaagacat ttctgctctc agctccgggg gtgaggtgtg
                                                                     1680
cetggeetet geeteeacee teeteetett caccaggtge atgeatgeee tetetgagte
                                                                     1740
tqqactttqc ttcccctcca ggagggacca ccctccccga ctggcctggg atatctttac
                                                                     1800
aagcaggcac tgtatttttt tattcgccat ctgatcccca tgcctagcag agtgctggca
                                                                     1860
cttagtaggt cctcaataaa tatttattaa atgatgagat gatggaaaaa aaaaa
                                                                     1915
```

```
<210> 6248
<211> 1824
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1433)...(160)
<223> similar to gi5912226 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6248
                                                                       60
tttttttttt ttcagagaca aacacttttt aatttcagta gcagtaggga aaaataacag
                                                                      120
catccatgca ttaaaactaa gagccttcac aaagacgttt caagatgtat tttgaacaaa
agaggacagg ctcttgggcc ccctctgggt cctgcctcag cacatcgagt cctcaaatcc
                                                                      180
                                                                      240
gagtgaggaa agtctgggga gctgcactgt ggagccatca gaaagtacct ggagcggctg
                                                                      300
ctgctgggct ggaaaagccg cagaagtcct cggcggtagc tggggttgct atggcaacag
                                                                      360
gagteceagg etgeeegtge tttetggeea caacetttae etcateatta atgaetteaa
                                                                      420
agtggctcct cttcctcttc ttcaatgtcc aaatcattct gcctaagata tgcttgtaat
                                                                      480
ggtccataca gtctctcctt gaaagctaag aaatccatca tgttcccttg aaagtgttgc
                                                                      540
aagaaaaaca gttcaatcaa atactccttg aagacctcct tcagagcctg catctcctgg
                                                                      600
tgatgatagt ccaggcactg cttcctcatc tgtgccatct ccggagaggc tgggggaatc
                                                                      660
tcctctaact tcttgggaac cttcttcatt cccgtgttcc ccacagacgt gagtgggagg
                                                                      720
ctggaaaggc ctgggggcac ggcagtcctg gaagggctgg tgggcggggg tggggacgtc
                                                                      780
atoccaaacc cogotgogoc cocagococg gggagcagca cgccgggcgt cototogaag
                                                                      840
eccaggggee ggggeagegg eggeeeetge ageaeetget getgetgaae eagetggeee
tggatgatgc tgctgatctg cggtggcaag ttagccgtgg tgatgtggct tgggctggcc
                                                                      900
aggggetgea ggeeggeeec accegegget geagggetet ggggteeeag gtggtggatg
                                                                      960
gtgcccctg actgtgtgtg gggctgggag ggtctccgct ctcggactgt gatgggcgta
                                                                     1020
cccgggtgct ggagctgaac ctgggctccc tgggcgatct gggtgagccc tgacccatcc
                                                                     1080
tgaaacacaa agtgtccacc actggagggg ctcaagctga tctgcctcac cagcacgctg
                                                                     1140
                                                                     1200
gcatccacga agtcccctgt agggctgctg ctgcagaggc ccagcccagg gccaggggca
                                                                     1260
cetgeacgea cattetgeaa ggeetgeece ggeeceggae tgggetgegt gggaetetgg
                                                                     1320
gtctggacct gctgggacaa gggggacgtg acctgaatgt atgatggaga cccatgctca
                                                                     1380
aaccgccgag gctgagcgct gaactggaag cctggagagg tggggctggg gagcggcagt
                                                                     1440
ggggccageg tgacctgtgg gcttccctgg agcccagggc ccacgccctg caggtcaaca
                                                                     1500
ttcatgttct gcccacccgc agggccccct ctcaccatca gctgctgtag ttggtggctg
                                                                     1560
ggggatggca gtgtgagggg cagggacggc tgggagcacg ctggctgctc ctcgcccgcg
                                                                     1620
ceggggcagg ceceaggeca etggacatgg egetggetge tetgggaget getgacgtge
tgcatgacta cgtcttcagg aaatgctccc taaacaaatg cagaaaagtt agagttgagt
                                                                     1680
gaggtgaget ccatgecegg gegeettteg gageetgeac aggtgtetgg aaaggtgget
                                                                     1740
caggagggc caatgcgggc ccagcaaacc tcaggcacga gcctgctacc cagggcaaaa
                                                                     1800
                                                                     1824
agtgctcaga tcagaatatc tgct
```

```
<210> 6249
<211> 1937
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (239)...(1877)
<223> similar to gi6018185 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6249
cctccactgc cggggctggg cccggccgcg ggaaggaccg aaggggatac agcgtgtccc 6

```
120
tgcqqcqqct qcaaqaqqac taagcatgga tggcagccgg agagtcagag caacctctgt
                                                                      180
cetteceaqa tatqqtecae eqtgeetatt taaaqqaeae ttgageaeca aaaqtaatge
                                                                      240
tttttgcact gactcctctt ctctcagact aagcactctc cagctggtca agaatcacat
                                                                      300
ggetqttcae tataataaaa teettteage caaagetgea gtagaetget eggtteeagt
                                                                      360
aaqcqtqaqt accaqcataa agtatgcaga ccaacaacga agagagaaac tcaaaaagga
attagcacaa tgtgaaaaag agttcaaatt aactaaaact gcaatgcgag ccaattataa
                                                                      420
aaataattcc aagtcacttt ttaatacctt acaaaagccc tcaggcgaac cgcaaattga
                                                                      480
ggatgacatg ttaaaagaag aaatgaatgg attttcatcc tttgcaaggt cactagtacc
                                                                      540
                                                                      600
ctcttcagag agactacacc taagtctaca taaatccagt aaagtcatca caaatggtcc
tgagaagaac tccagttcct ccccgtccag tgtggattat gcagcctccg ggccccggaa
                                                                      660
actgagetet ggagecetgt atggeagaag geecagaage acatteecaa atteecaeeg
                                                                      720
gtttcagtta gtcatttcga aagcacccag tggggatctt ttggataaac attctgaact
                                                                      780
cttttctaac aaacaattgc cattcactcc tcgcacttta aaaacagaag caaaatcttt
                                                                      840
cctqtcacaq tatcqctatt atacacctqc caaaaqaaaa aaqqatttta caqatcaacq
                                                                      900
gatagaaget gaaacccaga etgaattaag etttaaatet gagttgggga eagetgagae
                                                                      960
taaaaacatg acagattcag aaatgaacat aaagcaggta gcatctaatt gtgtgacata
                                                                     1020
tqatqccaaa gaaaaaatag ctcctttacc tttagaaggg catgactcaa catgggatga
                                                                     1080
gattaaggat gatgctcttc agcattcctc accaagggca atgtgtcagt attccctgaa
                                                                     1140
gcccccttca actcgtaaaa tctactctga tgaagaagaa ctgttgtatc tgagtttcat
                                                                     1200
tgaagatgta acagatgaaa ttttgaaact tggtttattt tcaaacaggt ttttagaacg
                                                                     1260
actgttcgag cgacatataa aacaaaataa acatttggag gaggaaaaaa tgcgccacct
                                                                     1320
gctgcatgtc ctgaaagtag acttaggctg cacatcggag gaaaactcgg taaagcaaaa
                                                                     1380
tgatgttgat atgttgaatg tatttgattt tgaaaaggct gggaattcag aaccaaatga
                                                                     1440
attaaaaaat gaaagtgaag taacaattca gcaggaacgt caacaattcc aaaaaggctt
                                                                     1500
gggatatgtt attgtcggca ccaaaggatg agaacgagat attcccttca ccaactgaat
                                                                     1560
ttttcatgcc tatttataaa tcaaagcatt ccagaagggg ttataattca acaggtgaat
                                                                     1620
gatgaaacaa atccttgaaa cttcaacttt ggatgaaaat catcccaagt atttcagaca
                                                                     1680
gtttaacaga tcgggaaact tctgtgaatg tcattgaagg tgatagtgac cctgaaaagg
                                                                     1740
ttgagatttc aaatggatta tgtggtctta acacatcacc ctcccaatct gttcaqttct
                                                                     1800
ccagtgtcaa aggcgacaat aatcatgaca tggaqttatc aactcttaaa atcatggaaa
                                                                     1860
tgagcattga ggactgccct ttggatgttt aatcttcatt aataaatacc tcaaatggcc
                                                                     1920
agtaactcaa aaaaaaa
                                                                     1937
```

```
<210> 6250
<211> 1049
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1050)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (831)...(132)
<223> similar to gi2633297 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6250

```
ttttttttt ttntgatcga aaggcaaata tttatttttc aggaagagaa acaggagacc
                                                                       60
tcgaggcttc tggacttagg aggtccgggc agctggtcca tggttgtcca ggtagtgccg
                                                                      120
cagggctgtg ggataatccg ttatgacgcc agtggctccc acgctgaagg ctgcttcaaa
                                                                      180
atccgactct tcattaaggc accaaaagac cacctgcacc cctcgctcct ccaagtgtcg
                                                                      240
gatcagactc ttcctcatga tcagccattt cgaaaccaca gccaataact ggttcaggca
                                                                      300
agagcaggaa aatgggaaat aggtcctgtt gatgatgttg ggcaggaagc agaagaagaa
                                                                      360
cttctcaggg attgggatga agggcagcag ccccaggtag taggaaagca gcacccagaa
                                                                      420
tecteggett attgtgaagg acaggggcat eteggggttg geageettge atttetteat
                                                                      480
gaccgagete tteteegagg eccagatggt gattteatta eggteatage gteteaceaa
                                                                      540
gectgeteac ggatgagete ttegttette cetttgatet etaegeteat gggtgteett
                                                                      600
ggaaacctct ggaacaggtc ctccagacga accatgcgcc ggtctgaccc gtgagcaaag
                                                                      660
tggcctggag agaagtaaac ctccagcttc tccttgtaga ggggcaggtc ctcgaagtcc
                                                                      720
aggctgccca catccctgtt taggcccgac tggcggcaca ggttctcatc atgtgacacc
                                                                      780
accaccacte tgtecegtgt cagetgacag tegageteca ggaggteega gegetgggee
                                                                      840
atggagctgt gggggtgaag gtcagcgggg ggcaggggca ggggactggg atgaggggca
                                                                      900
tggtggctgg gaggtggccg ggaatgtgag agcggagttc gtggcgggat gtgcaggcca
                                                                      960
cctccagggg gcgccagtca cccagctagg aagtgaatgg cgtcccttgc tgtgatgcag
                                                                     1020
tccacgacct gcacaccctc acatggcag
                                                                     1049
```

```
<210> 6251
<211> 1388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (538)...(87)
<223> similar to gi4929741 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6251 ttttttttt ttccgcagaa aagaaattta ttaccaagct ataaattaga ggcggcgggg 60 tgggcggggg gagccgagca gtcacgtatg gggcatctgc cctttttctc tgtcctcctg 120 ggcctggatt ttgagttcct catccaggcg ctcctttgcg cggaccacct ttgactgcag 180 gtagaaggag ccacccacgg atttatcatt caccttaaat aagtgttcat agttcttctg 240 gacctectea gggeteaget tggacaegtt gagaatetge tgtgeeteet ggaggetgag 300 gccggagagg ttggaagcgg ctgcagaccg gtgtccagcg cgtcctcggg catcagctgc 360 ggcccggctg gctgtgtgga catgtgggtg atcgctcagt cctcagcagc ccacacttca 420 ccctgggcct tecgagttgg tggctcaccc ctgcaaactc ctgccgcaag gcccgtgcaa 480 aggccctgcc caccacctgc acgcccatca caatgatctg ggccaggtac ttggctggac 540 aggcaaggca ggcgggtgaa cttgaccgag ctcccagagg cagacttggc cccacctcat 600 ccttcaggaa aggcgtagag gagcaaggca aagtggctgc aaccaccggc ttcaggaaga 660 aacactgtgg tctgggagcc agaacacagg gacagccctg gacctggcag taactcactc 720 tcgaccctgg ggccgaccat cactcttcct gagtttctga gatcatcagg cccaaccttt 780 actttaccaa cggggaaaca gatctgtcct aattctccca agtccgaaga ctttaagtcc 840 attccattca ataaaacaaa cttactatgc aaacctgttt ccatcttcaa ggagctaaaa 900 gcccactagg agggtattta aacacactat ggaccaaatc atgagggaga gtcaggctcg 960 ttcatttgtg cagccattgg ttcacccatt cattcaaaca tctgctgaga gtctactctg 1020 ctcagcactt gagcacaaag ctacacagaa cctggtccct gccccgagtc agagcacact 1080 gctggcctgg cagggaaccc cactgtcaca caccaggctg aacatgccgg aacactgcac 1140

```
gtgtgattcc atgccccgca gaggccctgg ggactcacta agatgtgagc ggaagcaaca 1200 gagtcgaggg aaaactcaag actgagatgg gattcggtga gaggagggg ttctgtgtga 1260 gaggaggggcg ttccgtgaga ggaggggtt ccgtgagagg aggggttcc gtgagaggag 1320 ggggttctgt gtgagaggag ggggttctgt gtgagaggag ggggttctgt gtgagaggag gggttccgt 1388
```

```
<210> 6252
<211> 6491
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (194)...(4099)
<223> similar to gi3327068 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6252 ctgcaggaat tcggcacgag ccggcacaaa cctcagtggt ggttctgtgg ttgtttctgt 60 ctttttttga tagaatcttt gattagtatc gaatttactg tatttggcca tgtgaactat 120 tgggagcctc ctagggtgag ggaaattaag agctttcaga ggaatgaggc gactgatttg 180 caaacggatc tgtgattata aaagcttcga tgatgaagaa tcagtggatg gaaataggcc 240 atcatcaget geatcageet teaaggttee tgeacetaaa acateeggaa atcetgeeaa 300 cagtgcaagg aagcctggtt cagcaggtgg ccctaaggtt ggagcaggtg cttctaagga 360 aggaggtgct ggagcagttg atgaagatga ttttataaaa gcttttacag atgtcccttc 420 tattcagatt tattctagtc gagaactcga agaaacatta aataaaatca gggaaatttt 480 gtcagatgat aaacatgact gggatcagcg tgccaatgca ctgaagaaaa ttcgatcact 540 gettgttget ggagetgeae agtatgattg etttttteaa eatttaegat tgttggatgg 600 agcacttaaa ctttcagcta aggatcttag atcccaggtg gttagagaag cttgtattac 660 tgtagcccac ctttcaacag ttttgggaaa caagtttgat catggcgctg aagccattgt 720 acctacactt tttaatctcg tccccaatag tgcaaaagtc atggcaactt ctggatgtgc 780 agcaatcaga tttatcattc ggcatactca tgtacccaga cttatacctt taataacaag 840 caattgcaca tcaaaatcag ttcccgtgag gagacgttca tttgaatttt tagatttatt 900 gttgcaagag tggcagactc attcattgga aagacatgca gccgtcttgg ttgaaactat 960 taaaaaggga attcatgatg ctgacgctga ggccagagtg gaggcaagaa agacatacat 1020 gggtcttaga aaccactttc ctggtgaagc tgaaacatta tataattccc ttgagccatc 1080 ttatcagaag agtcttcaaa cttacttaaa gagttctggc agtgtagcat ctcttccaca 1140 atcagacagg tectcateca geteacagga aagteteaat egecettttt ettecaaatg 1200 gtctacagca aatccatcaa ctgtggctgg aagagtatca gcaggcagca gcaaagccag 1260 ttcccttcca ggaagcctgc agcgttcacg aagtgacatt gatgtgaatg ctgctgcagg 1320 tgccaaggca catcatgctg ctggacagtc tgtgcgaagc gggcgcttag gtgcaggtgc 1380 cctgaatgca ggttcctatg cgtcactaga ggatacttct gacaagctgg atggaacagc 1440 atctgaagat ggccgggtga gagcaaaact ttcagcacca cttgctggca tgggaaatgc 1500 caaggcagat tctagaggaa gaagtcgaac aaaaatggtg tctcaatcac agcctggtag 1560 ccggtctggg tctccaggaa gagttctgac cacaacagcc ctgtccactg tgagctctgg 1620 tgttcaaaga gtcctggtca attcagcctc agcacaaaaa agaagcaaga taccacggag 1680 ccagggctgt agcagagagg ctagtccatc taggctttca gtggcccgaa gcagtcgtat 1740 tectegacea agtgtgagte aaggatgeag eegggaaget agtegggaga geageagaga 1800 cacaagteet gttegetett tteageeest egeeteeaga caccatteea gateaactgg 1860 tgccctctac gcccccgaag tgtatggggc ctcaggtcca ggttatggga tcagccaatc 1920

```
aagtegaetg tegtettetg ttagtgeeat gegagteetg aacacaggtt etgatgtgga
                                                                    1980
ggaggcggtg gcagatgcct tgctcttagg agacatacgg actaagaaaa aaccagctcg
                                                                    2040
aagaagatat gaatcatatg gaatgcattc agatgatgac gccaacagcg atgcatctag
                                                                    2100
tgcttgttca gaacgctcct atagttctcg aaatggtagt attcctacat atatgaggca
                                                                    2160
gacgggaaga tgtgggcaga agtcctcaat agatgtgcta gttccaattg gtcagaaagg
                                                                    2220
aaagaaggcc tcctaggtct gcagaactta ttaaaaaaatc agagaacact aagtcgagtt
                                                                    2280
gaactgaaaa gattatgtga aattttcaca agaatgtttg ctgaccctca tggcaaqaqa
                                                                    2340
gtattcagca tgtttttgga gactctagtg gatttcatac aagtccacaa agatgatctt
                                                                    2400
caagattggt tgtttgtact gctgacacaa ctactaaaaa aaatgggtgc tgatttgctt
                                                                    2460
ggatetgtte aggeaaaagt teagaaagee ettgatgtta caaqagagte ttttecaaat
                                                                    2520
gatcttcagt tcaatattct aatgagattt acagttgatc agacccagac accaagctta
                                                                    2580
aaggtgaagg ttgctatcct taaatacata gaaactctgg ccaaacagat ggatccagga
                                                                    2640
gattttataa attccagtga aactcgccta gcagtgtctc gggtcatcac ttggacaaca
                                                                    2700
gaacccaaaa gttctgatgt tcggaaggca gcacagtcag tgctgatttc attatttgaa
                                                                    2760
ctcaataccc cagagtttac aatgttatta ggagctttac caaaaacttt tcaggatggt
                                                                    2820
gctaccaagc ttcttcataa tcaccttcga aacactggca atggaaccca gagttccatg
                                                                    2880
gggagtcctt tgacaagacc aacaccacga tcaccagcta actggtccag tcctcttact
                                                                    2940
tetectacea atacateaca gaataettta tetecaagtg catttgatta tgacacagaa
                                                                    3000
aatatgaact ctgaagatat ttatagctct cttagaggtg tcactgaagc aatccagaat
                                                                    3060
ttcagcttcc gtagccaaga agatatgaat gagccattga aaagggattc taaaaaagat
                                                                    3120
gatggcgatt caatgtgtgg tggtcctggg gatgtctgac ccaagagcag gaggtgatgc
                                                                    3180
tactgactca agtcaaacag ctctttgata ataaagcttc attgctccat tcaatgccta
                                                                    3240
ctcactcctc tccacgctct cgagactata atccatataa ctattcagat agcatcagtc
                                                                    3300
ccttcaacaa gtctgccctc aaggaagcca tgtttgatga tgatgctgac cagtttcctg
                                                                    3360
acgatctttc cctagatcat tctgacctag ttgcagagtt gttgaaggag ctgtctaacc
                                                                    3420
ataatgagcg tgtagaagaa agaaaaattg ccctctatga acttatgaaa ctgacacagg
                                                                    3480
aagaatettt tagtgtttgg gatgaacaet teaaaacaat attgetttta ttgettgaaa
                                                                    3540
cgcttggaga taaagagcct acaatcaggg ctttggcatt aaaggtttta agagaaatcc
                                                                    3600
taaggcatca accagcaaga tttaaaaact atgcagaatt gactgtcatg aaaacattgg
                                                                    3660
aagcacataa agatcctcat aaggaggtgg tgagatctgc tgaggaagcg gcatcagtgt
                                                                    3720
ttggccactt caatttagtc cagagcagtg catcaaagtc ctttgtccta tcattcaaac
                                                                    3780
tgcagactac ccaattaatc tggctgcaat caaaatgcaa acaaaagtga tagagagagt
                                                                    3840
gtccaaggaa accctaaacc tgcttttgcc agagattatg ccaggtctaa tacagggtta
                                                                    3900
tgataattca gagagcagtg ttcggaaagc ttgtgtcttc tgcctggtgg ctgttcatgc
                                                                    3960
ggtaattggt gatgaactaa aaccacatct cagtcaactt actggcagta aaatgaagct
                                                                    4020
actgaatctt tacatcaaac gtgcacaaac aggttctgga ggagctgatc ccactactga
                                                                    4080
tgtttctgga caaagttagt gaagctcatc acagcgaacc aggtctctca aaagaaagga
                                                                    4140
cagatagacc acceteatea atgaaaggaa gtteteaaac acateetttg gaacttaeta
                                                                    4200
ttgtttccca gttttagttt tttgtttcgt ttcgttttgt attttctgta acagaggact
                                                                    4260
atcctcagtc tgcatgtaac ttttatgata gttattccaa attcaagaag aagcagtatt
                                                                    4320
4380
ctttgtcttc ccattaacct ttgccagtgt tatgattgta taaatttttt taaatgctgg
                                                                    4440
ttaaacagga atgcttaaag ctttaaaagt ttaacagtct aaaacatttt tgctttatt
                                                                    4500
caactgcaga ataatattt tattgctact ttgagttttg tttcgtatca tgtcctatgc
                                                                    4560
tagaaatatt taaatgatgt gaaacaaagc aggactaatt tgaactacag ctggactccg
                                                                    4620
tttgtgtgat ggtgatacat gtcattagtt gcaacttctt tggggtgatc tatagtttga
                                                                    4680
aaactaaaac ctcaaagaca gatgttacag aatcagccag ttctgtaaaa ctgatattgt
                                                                    4740
ctattggtta ttgatcttgc catctttatt taaaaccatg tcccttctat gatcccttaa
                                                                    4800
gaaagctgca ccaaatcatc tgcctgtttt ttcttgatac ttactgaaat agaaggtttt
                                                                    4860
attgcagggt ttattttggt ttgtttatat ctttgttgtg aatgatgctt ttttgtattt
                                                                    4920
attaatatca aattcactta tgaataaact tgataatgga aacggacaaa aaaaatcaag
                                                                    4980
tgcgtgtgtg tccttgaccg tcttctgttt ctcacgtaat aaacaaatta tcgagacatg
                                                                    5040
ggagtgacca gcaccttttc tttaaatggt ggaacctggt ttccttttac catgaaattg
                                                                    5100
tcttacttga aaatattgat cctgatgaga gagaagatgg tgccaaggct gtctttgtat
                                                                    5160
aatgggctca aattctctac ctcttcaggg ctaatacttt taactgagct gctgcctata
                                                                    5220
gtgtcttttg gaaaactact taaagggtga ttttctgtta ctttttagca aatttttta
                                                                    5280
atcacctett getacaccca ttetttteat gtgcagecga etcaaaaatt accagttttg
                                                                    5340
```

```
5400
gtgaaagget aaattagata atttggaacc aggatactaa tgatttetea tetttaettt
                                                                     5460
tttttaatcc taatataaag tgaatttgat tgaaaaggca aatagctatt agggaagcag
                                                                     5520
tttgccattg ttgcagagtt atctgtactt tgtttaactg aaaaaaatgt agaaatatat
                                                                     5580
gtaaagaatt taagacaaga gtactgaatg gatgatttgt cataggcttt cccctttctt
                                                                     5640
tetgttetag cagcaggaaa agttteteta tateetetee etetacetgt aacaattttg
                                                                     5700
ttttctactg ttaattacat tgtgtattta tagttctatg cttactgttg tgcatatact
                                                                     5760
ggcaataaaa ctgtacataa cattacttga aaaagttaat aatgtatatc agtttttctg
                                                                     5820
teteactgtg taacaagtea eteagtttta ttttaaettt agaeggtett gtateagtgg
                                                                     5880
tggtctcttg aattttgtaa gttcatctga ggagaaaaga tttttcaggt gtagctacca
                                                                     5940
caatcaaagg tatatagcta catacgcatg tatatattac agcttatctg taagaagaaa
                                                                     6000
atgcatttta aacacaactc ttctcagtag cattttatga cctttggata tgtttgtaat
cattlegaat caaaatattg atttaatttt gacctetggt ttaagatact getttaacta
                                                                     6060
ctgttgacaa ccaagtagag tgacttaagc tgaacagtaa ctaactggaa aattcgataa
                                                                     6120
gcacctggca tctaatggca ggcaggcact caagatatga attaactaca taatggaaaa
                                                                     6180
atatggttta acgtgtccaa atgaaagcta gtagatgtaa acatggaaaa attgtgttta
                                                                     6240
caattttata atctcagttg ataagactat aagaaagctg attatttaaa tcactatata
                                                                     6300
caatacaccc ttaatttgtt cattccagaa acatactgag atgtcagcta cttaaaaaatg
                                                                     6360
gtcacaaaaa gctactgttt atatttttcc tcctgctatt ctctcccaaa ttaattatta
                                                                     6420
ataagtgttg ttcatttact gcactgctga gaactaatta aaattatata ttccagattg
                                                                     6480
taaaaaaaaa a
                                                                     6491
```

```
<210> 6253
<211> 1366
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (187)...(793)
<223> similar to gi1370222 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6253
agcacactcc agaaaaaaac ttcccaaacc ctgggcaact gaggttctga tgtggagctc
                                                                       60
tggatggaaa gcgtgctgaa gtcttgttaa actagcaagc ttttgtttgg aggtccaccg
                                                                      120
ccgaaggcgc acaggcctgt gggaacacga gcgttgagac tgggggcgtc tagatgatcc
                                                                      180
aagggetegg aceteaggea catgegaatg acceggagtg tggacaacgt ceagtteetg
                                                                      240
ccctttctca ccacggaagt caagtgaggg gccgacggct gcgcaacctg ggctggctga
                                                                      300
gttatggggc tttgaaggga gacgggatcc tcatcgtcgt caacacagtg ggtgctgcgc
                                                                      360
ttcagaccct gtatatcttg gcatatctgc attactgccc tcggaagcgt gttgtgctcc
                                                                      420
tacagactgc aaccetgeta ggggteette teetgggtta tggetaettt tggeteetgg
                                                                      480
tacccaaccc tgaggcccgg cttcagcagt tgggcctctt ctgcagtgtc ttcaccatca
                                                                      540
gcatgtacct ctcaccactg gctgacttgg ctaaggtgat tcaaactaaa tcaacccaat
                                                                      600
gteteteeta eccaeteace attgetacee tteteacete tgeeteetgg tgeetetatg
                                                                      660
ggtttcgact cagagatece tatateatgg tgtccaaett tecaggaate gtcaccaget
                                                                      720
ttatccgctt ctggcttttc tggaagtacc cccaggagca agacaggaac tactggctcc
                                                                      780
tgcaaacctg aggctgctca tctgaccact gggcacctta gtgccaacct gaaccaaaga
                                                                      840
gacctccttg tttcagctgg gcctgctgtc cagcttccca ggtgcagtgg gttgtgggaa
                                                                      900
caagagatga ctttgaggat aaaaggacca aagaaaaagc tttacttaga tgattgattg
                                                                      960
gggcctagga gatgaaatca ctttttattt tttagagatt ttttttttta attttggagg
                                                                     1020
```

```
ttggggtgca atctttagaa tatgccttaa aaggccgggc gcgggggctc acgcctgtaa 1080 tcccagcact ttgggaggcc aaggtgggcg gatcgcctga ggtcaggagt tcaagaccaa 1140 cctgactaac atggtgaaac cccatctcta ctaaaaatac aaaattagcc aggcatgatg 1200 gcacatgcct gtaatcccag atacttggga ggctgaggca ggagaattgc ttgaacccag 1260 gaggtggagg ttgcagtgag ctgagatcgt gccattgtga tatgaatatg ccttatatgc 1320 tgatatgaat atgccttaaa ataaagtgtt ccccaccct gcaaaa 1366
```

```
<210> 6254
<211> 5805
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (236)...(4528)
<223> similar to gi2094873 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6254 tttcgtggcg cgggagccga gaggtggcgc gggggtgcca ccgttgccgc aggctggaga 60 gagattgete ccagtgagge gegtacegte tgggegaggg etteattett eegeggegte 120 180 cctggaggac tggagactga tgcatgaggg ggctacggag gcgcaggagc ggtggtgatg 240 qtctqqqaaq cggaqctqaa gtgccctggg ctttggtgag gcgtgacagt ttatcatgac 300 cgtgttcagg caggaaaacg tggatgatta ctacgacacc ggcgaggaac ttggcagtgg 360 acagtttgcg gttgtgaaga aatgccgtga gaaaagcacc ggcctccagt atgccgccaa 420 attcatcaag aaaaggagga ctaagtccag ccggcggggt gtgagccgcg aggacatcga 480 gegggaggte agcateetga aggagateea geaceceaat gteateacee tgeacgaggt 540 ctatgagaac aagacggacg tcatcctgat cttggaactc gttgcaggtg gcgagctgtt 600 tgacttetta getgaaaagg aatetttaae tgaagaggaa geaaetgaat tteteaaaea aattettaat ggtgtttact acctgcacte cettcaaate geccaetttg atettaagee 660 tgagaacata atgcttttgg atagaaatgt ccccaaacct cggatcaaga tcattgactt 720 780 tgggttggcc cataaaattg actttggaaa tgaatttaaa aacatatttg ggactccaga 840 gtttgtcgct cctgagatag tcaactatga acctcttggt cttgaggcag atatgtggag 900 tateggggta ataacetata teeteetaag tggggeetee eeatttettg gagacactaa 960 gcaagaaacg ttagcaaatg tatccgctgt caactacgaa tttgaggatg aatacttcag taataccagt gccctagcca aagatttcat aagaagactt ctggtcaagg atccaaagaa 1020 1080 gagaatgaca attcaagata gtttgcagca tccctggatc aagcctaaag atacacaaca ggcacttagt agaaaagcat cagcagtaaa catggagaaa ttcaagaagt ttgcagcccg 1140 gaaaaaatgg aaacaatccg ttcgcttgat atcactgtgc caaagattat ccaggtcatt 1200 cctgtccaga agtaacatga gtgttgccag aagcgatgat actctggatg aggaagactc 1260 ctttgtgatg aaagccatca tccatgccat caacgatgac aatgtcccag gcctgcagca 1320 cettetggge teattateca actatgatgt taaccaacce aacaagcacg ggacacetee 1380 attactcatt gctgctggct gtgggaatat tcaaatacta cagttgctca ttaaaagagg 1440 ctcgagaatc gatgtccagg ataagggcgg gtccaatgcc gtctactggg ctgctcggca 1500 tggccacgtc gataccttga aatttctcag tgagaacaaa tgccctttgg atgtgaaaga 1560 caagtetgga gagatggeee tecaegtgge agetegetat ggeeatgetg aegtggetea 1620 1680 agttacttgt gcagcttcgg ctcaaatccc aatatccagg acaaggaaga agaaaccccc ctgcactgtg ctgcttggca cggctattac tctgtggcca aagccctttg tgaagccggc 1740 1800 tgtaacgtga acatcaagaa ccgagaagga gagacgcccc tcctgacagc ctctgccagg ggctaccacg acatcgtgga gtgtctggcc gaacatggag ccgaccttaa tgcttgcgac 1860

```
1920
aaggacggac acattgccct tcatctggct gtaagacggt gtcagatgga ggtaatcaag
                                                                     1980
actetectea gecaagggtg tttegtegat tateaagaca ggeaeggeaa taeteeeete
                                                                     2040
catgtqqcat gtaaagatgg caacatgcct atcgtggtgg ccctctgtga agcaaactgc
aatttggaca tetecaacaa gtatgggega aegeetetge aeettgegge caacaaegga
                                                                     2100
atcctagacg tggtccggta tctctgtctg atgggagcca gcgttgaggc gctgaccacg
                                                                     2160
                                                                     2220
gacggaaaga cggcagaaga tcttgctaga tcggaacagc acgagcacgt agcaggtctc
                                                                     2280
cttgcaagac ttcgaaagga tacgcaccga ggactcttca tccagcagct ccgacccaca
                                                                     2340
cagaacctgc agccaagaat taagctcaag ctgtttggcc actcgggatc cgggaaaacc
                                                                     2400
accettgtag aateteteaa gtgtgggetg etgaggaget tttteagaag gegteggeee
                                                                     2460
agactgtctt ccaccaactc cagcaggttc ccaccttcac ccctggcttc taagcccaca
                                                                     2520
gtctcagtga gcatcaacaa cctgtaccca ggctgcgaga acgtgagtgt gaggagccgc
agcatgatgt tcgagccggg tcttaccaaa ggaatgctgg aggtgtttat ggccccgacc
                                                                     2580
caccaccege actgetegge egatgaccag tecaccaagg ccategacat ccagaacget
                                                                     2640
tatttgaatg gagttggcga tttcagcgtg tgggagttct ctggaaatcc tgtgtatttc
                                                                     2700
                                                                     2760
tgctgtaata actattttgc tgcaaataat cccacgtcaa tccatgttgt tgtctttagt
                                                                     2820
ctagaagagc cctatgagat ccagctgaac ccagtgattt tctggctcag tttcctgaag
tecettgtee cagttgaaga acceatagee tteggtggea agetgaagaa eecaeteeaa
                                                                     2880
                                                                     2940
gttgtcctgg tggccaccca cgctgacatc atgaatgttc ctcgaccggc tggaggcgag
tttggatatg acaaagacac atcgttgctg aaagagatta ggaacagggt tggaaatgat
                                                                     3000
                                                                     3060
cttcacattt caaataagct gtttgttctg gatgctgggg cttctgggtc aaaggacatg
                                                                     3120
aaggtacttc gaaatcatct gcaagaaata cgaagccaga ttgtttcggt ctgtcctccc
atgactcacc tgtgtgagaa aatcatctcc acgctgcctt cctggaggaa gctcaatgga
                                                                     3180
cccaaccage tgatgteget geageagttt gtgtacgaeg tgeaggaeca getgaaccee
                                                                     3240
ctggccagcg aggaggacct caggcgcatt gctcagcagc tccacagcac aggcgagatc
                                                                     3300
aacatcatgc aaagtgaaac agttcaggac gtgctgctcc tggacccccg ctggctctgc
                                                                     3360
acaaacgtcc tggggaagtt gctgtccgtg gagaccccac gggcgctgca ccactaccgg
                                                                     3420
                                                                     3480
ggccgctaca ccgtggagga catccagcgc ctggtgcccg acagcgacgt ggaggagctg
etgeagatee tegatgeeat ggacatetge geeegggace tgageagegg gaceatgqtg
                                                                     3540
gacgtcccag ccctgatcaa gacagacaac ctgcaccgct cctgggctga tgaggaggac
                                                                     3600
gaggtgatgg tgtatggtgg cgtgcgcatc gtgcccgtgg aacacctcac cccctttcca
                                                                     3660
tgtggcatct ttcacaaggt ccaggtgaac ctgtgccggt ggatccacca gcaaagcaca
                                                                     3720
gagggcgacg cggacatccg cctgtgggtg aatggctgca agctggccaa ccgtggggcc
                                                                     3780
gagetgetgg tgetgetggt caaccaegge cagggeattg aggtecaggt cegtggeetg
                                                                     3840
                                                                     3900
gagacggaga agatcaagtg ctgcctgctg ctggactcgg tgtgcagcac cattgagaac
gtcatggcca ccacgctgcc agggctcctg accgtgaagc attacctgag cccccagcag
                                                                     3960
ctgcgggagc accatgagcc cgtcatgatc taccagccac gggacttctt ccgggcacag
                                                                     4020
actotgaagg aaacctcact gaccaacacc atgggggggt acaaggaaag cttcagcagc
                                                                     4080
atcatgtget tegggtgtca egaegtetae teacaggeca geeteggeat ggacatecat
                                                                     4140
gcatcagacc tgaacctcct cactcggagg aaactgagtc gcctgctgga cccgccgac
                                                                     4200
cccctgggga aggactggtg ccttctcgcc atgaacttag gcctccctga cctcgtggca
                                                                     4260
aagtacaaca ccaataacgg ggctcccaag gatttcctcc ccagccccct ccacgccctg
                                                                     4320
ctgcgggaat ggaccaccta ccctgagagc acagtgggca ccctcatgtc caaactgagg
                                                                     4380
gagetgggte geegggatge egeagaettt ttgetgaagg cateetetgt gtteaaaate
                                                                     4440
aacctggatg gcaatggcca ggaggcctat gcctcgagct gcaacagcgg cacctcttac
                                                                     4500
aattecatta getetgttgt ateceggtga gggeageete tggettggge agggtetgtt
                                                                     4560
tggactgcag aagcaagggg gtgatgtagc ccatcettcc etttggagat getgagggtg
                                                                     4620
tttcttcctg cacccacage cagggggatg ccactcctcc ctccggcttg acctgtttct
                                                                     4680
ctgccgctac ctccctcccc gtctcattcc gttgtctgtg gatggtcatt gcagtttaag
                                                                     4740
agcagaacag atctttact ttggccgctt gaaaagctag tgtacctcct ctcagtgttt
                                                                     4800
tggactccat ctctcatcct ccagtacctt gcttcttact gataattttg ctggaattcc
                                                                     4860
taacttttca atgacatttt ttttaactac tatattgatt gtcctttaaa aaagaaaagt
                                                                     4920
gcatatttat ccaaaatgtg tatttcttat acgcttttct ttgttatacc atttcctcaq
                                                                     4980
cttatctctt ttatatttgt aggagaaact cccatgtatg gaatcccact gtatgattta
                                                                     5040
taaacagaca atatgtgagt gccttttgca gaagagggtg tgtttgaaat catcggagtc
                                                                     5100
agccaggage tgtcaccaag gaaacgctac etetetgtee ettgetgtat getgateate
                                                                     5160
gccagaggtg cttcaccctg agttttgttt tgtattgttt tctgacagtt tttctgtttt
                                                                     5220
gtttggcaag gaaaggggag aagggaatcc tcctccaggg tgattttatg atcagtgttg
                                                                     5280
```

```
ttgctctagg aagacatttt tccgtttgct tttgttccaa tgtcaatgtg aacgtccaca
                                                                     5340
tgaaacctac acactgtcat gettcatcat teceteteat etcaggtaga aggttgacae
                                                                     5400
agttgtaggg ttacagagac ctatgtaaga attcagaaga cccctgactc atcatttgtg
                                                                     5460
gcagtccctt ataattggtg catagcagat ggtttccaca tttagatcct ggtttcataa
                                                                     5520
cttcctgtac ttgaagtcta aaagcagaaa ataaaggaag caagttttct tccatgattt
                                                                     5580
taaattgtga tcgagtttta aattgatagg agggaacatg tcctaattct tctgtcctga
                                                                     5640
gaagcatgta atgttaatgt tatatcatat gtatatatat atatgcacta tgtatataca
                                                                     5700
tatatattaa tactggtatt tttacttaat ctataaaatg tcggttaaaa agttgtttgt
                                                                     5760
tttttttttt ttttataaat aaactgttgc tcgttaaaaa aaaaa
                                                                     5805
```

```
<210> 6255
<211> 1962
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (16)...(1188)
<223> similar to gi6015189 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6255 tttcgtggcc gcgagatggg gaagatggca gcggccgtgg gctctgtggc gactctggcg 60 actgageceg gggaggaege ettteggaaa etttteeget tetacegtea gageeggeee 120 gggaccgcag acctggaagg ggtcatcgac ttctcggcgg cccacgcagc ccgtggcaag 180 ggtcctggtg cccaaaaggt gatcaaatct cagctaaatg tgtcttctgt cagtgagcag 240 aatgcatata gagcaggtct tcagcccgtc agcaagtggc aagcctatgg actcaaaggc 300 tatcctgggt ttattttat cccaaaccc ttcctcccag gttaccagtg gcactgggtg 360 aaacagtgcc ttaagttata ttcccagaaa cctaatgtat gtaacctgga caaacacatg 420 tetaaagaag agacccaaga tetgtgggaa cagagcaaag agtteetgag gtataaagaa 480 gcgactaaac ggagaccccg aagtttactg gagaaactgc gttgggtgac cgtaggctac 540 cattataact gggacagtaa gaaatactca gcagatcatt acacaccttt cccttctgac 600 ctgggtttcc tctcagagca agtagccgct gcctgtggat ttgaggattt ccgagctgaa 660 gcagggatcc tgaattacta ccgcctggac tccacactgg gaatccacgt agacagatct 720 gagetagate acteceaaac ecetggetgt catteagett tggacagtee gecatettte 780 tectgggtgg tettcaaagg gatgaggeec ceaeggeeat gtttatgeac agtggtgaca 840 teatgataat gtegggttte ageegeetet tgaaceaege agteeetegt gteetteeaa 900 atccagaagg ggaaggcctg cctcactgcc tagaggcacc tctccctgct gtcctcccga 960 gagattcaat ggtagagcct tgttctatgg aggactggca ggtgtgtgcc agctacttga 1020 agaccgctcg tgttaacatg actgtccgac aggtcctggc cacagaccag aatttccctc 1080 tagaacccat cgaggatgaa aaaagagaca tcagtacaga aggtttctgc catctggatg 1140 accagaatag cgaagtaaaa cgggccagga taaaccctga cagctgagac ttggagatcc 1200 catcettttt actcaggeac etgettaceg taaatgatea tgttattgtg tattgeegtg 1260 gacttcagca cccagacaag ccaaaaacag agacagggaa gaactcattg ttgatcacac 1320 tgttgccttg gaacccacgc agaagtaaac tcagccactt tgctcagaga agtqtttqac 1380 atggtctgtt cctagttaca tgttggctgt aatgtatgtt gagaagtcag tccaaggagg 1440 .tatgttcttc cacaacagcc ttctcagcct ctgctatttc ctttgaggaa ggtagaagtg 1500 agtttccatg tttgcagagt atttaaatac ctcagatttt attaatgaga aatacagtac 1560 ccctccctcc actccatctg gtaatttatg gtaaaattgt ggttctgtga accagctatt 1620 agteteatet tettaaetee eteaggeate ateaaattet ttgatettet etteeacete 1680

```
tctggctctc atggaagaat cctttacaca tgaaaacaat ggaactggaa aatcttgtct 1740 tttagaaaag aaattaatca caactatctc tcttgcctaa aagataaata taggtaaacc 1800 caaggaaagg ggaatttagt ttctctacat gtcatttcgg tctccaaact ccctgttggc 1860 tttttaatgc aattttaatt gttggaataa aaaagtccca agggtgtttt gttactgttt 1920 tctccatgaa taaactcact tgattttaaa ttaaaaaaaa aa 1962
```

```
<210> 6256
<211> 6553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (193)...(5956)
<223> similar to gill07696 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6256 gaatctctca cgagctggag ccggagccat tttcccccct tcggccgcgg cgaggaggag 60 ccggagcggg agtgacaccg agccggaccc agcgcgacct gcggcggctc cgggtgactc 120 gggccagtgt agaggtcctc aggccgccgg caggagcagc tgggccaatt ccctggccgg 180 gagcggaagg ggatggcgtc gggcctgggc tececgtece ectgeteggc gggcagtgag 240 300 gaggacccag aagaggattt gtcagaaaca gagactccaa agctcaagaa gaagaaaaag 360 cctaagaaac ctcgggaccc taaaatccct aagagcaagc gccaaaaaaa ggagcgtatg 420 ctcttatgcc ggcagctggg ggacagctct ggggaggggc cagagtttgt ggaggaggag 480 gaagaggtgg ctctgcgctc agacagtgag ggcagcgact atactcctgg caagaagaag 540 aagaagaagc ttggacctaa gaaagagaag aagagcaaat ccaagcggaa ggaggaggag 600 gaggaggatg atgatgatga tgatgattca aaggagccta aatcatctgc tcagctcctg 660 gaagactggg gcatggaaga cattgaccac gtgttctcag aggaggatta tcgaaccctc 720 accaactaca aggcetteag ceagtttgte agaceetea ttgetgeeaa aaateecaag 780 attgctgtct ccaagatgat gatggttttg ggtgcaaaat ggcgggagtt cagtaccaat 840 aaccccttca aaggcagttc tggggcatca gtggcagctg cggcagcagc agcggtagct 900 gtggtggaga gcatggtgac agccactgag gttgcaccac cacctccccc tgtggaggtg 960 cctatccgca aggccaagac caaggaggc aaaggtccca atgctcggag gaagcccaag 1020 ggcagccctc gtgtacctga tgccaagaag cctaaaccca agaaagtagc tcccctgaaa 1080 atcaagctgg gaggttttgg ttccaagcgt aagagatcct cgagtgagga tgatgactta 1140 gatgtggaat ctgacttcga tgatgccagt atcaatagct attctgtttc tgatggttcc 1200 accagccgta gtagccgcag ccgcaagaaa ctccgaacca ctaaaaagaa aaagaaaggc 1260 gaggaggagg tgactgctgt ggatggttat gagacagacc accaggacta ttgcgaggtg 1320 tgccagcaag gcggtgagat catcctgtgt gatacctgtc cccqtqctta ccacatqqtc 1380 tgcctggatc ccgacatgga gaaggctccc gagggcaagt ggagctgccc acactgcgag 1440 aaggaaggca tccagtggga agctaaagag gacaattcgg agggtgagga gatcctggaa 1500 gaggttgggg gagacctcga agaggaggat gaccaccata tggaattctg tcgggtctgc 1560 aaggatggtg gggaactgct ctgctgtgat acctgtcctt cttcctacca catccactgc 1620 ctgaatcccc cacttccaga gatccccaac ggtgaatggc tctgtccccg ttgtacgtgt 1680 ccagctctga agggcaaagt gcagaagatc ctaatctgga agtggggtca gccaccatct 1740 cccacaccag tgcctcggcc tccagatgct gatcccaaca cgccctcccc aaagcccttg 1800 gaggggggc cagagcggca gttctttgtg aaatggcaag gcatgtctta ctggcactgc 1860 tcctgggttt ctgaactgca gctggagctg cactgctcag gtgatgttcc gaaactatca 1920

```
1980
geggaagaat gatatggatg agccacette tggggacttt ggtggtgatg aagagaaaag
cccgaaagcg aaagaacaag gaccctaaat ttgcagagat ggaggaacgc ttctatcgct
                                                                    2040
atgggataaa acccgagtgg gatgatgatc caccgaatcc tcaaccacag tgtggacaag
                                                                    2100
                                                                    2160
aagggccacg tccactactt gatcaagtgg cgggacttac cttacgatca ggcttcttgg
                                                                    2220
gagagtgagg atgtggagat ccaggattac gacctgttca agcagagcta ttggaatcac
                                                                    2280
agggagttaa tgaggggtga ggaaggccga ccaggcaaga agctcaagaa ggtgaagctt
                                                                    2340
cggaagttgg agaggcctcc agaaacgcca acagttgatc caacagtgaa gtatgagcga
cagccagagt acctggatgc tacaggtgga accetgcacc cetatcaaat ggagggeetg
                                                                    2400
aattggttgc gcttctcctg ggctcagggc actgacacca tcttggctga tgagatgggc
                                                                    2460
cttgggaaaa ctgtacagac agcagtcttc ctgtattccc tttacaagga gggtcattcc
                                                                    2520
aaaggcccct tcctagtgag cgccctctt tctaccatca tcaacttggg agcgggagtt
                                                                    2580
tgaaatgtgg gctccagaca tgtatgtccg taacctatgt gggtgacaag gacagccgtg
                                                                    2640
                                                                    2700
ccatcatccg agagaatgag ttctcccttt gaagacaatg ccattcgtgg tggcaagaag
gcctcccgca tgaagaaaga ggcatctgtg aaattccatg tgctgctgac atcctatgaa
                                                                    2760
ttgatcacca ttgacatggc tattttgggc tctattgatt gggcctgcct catcgtggat
                                                                    2820
gaagcccatc ggctgaagaa caatcagtct aagttcttcc gggtattgaa tggttactca
                                                                    2880
ctccagcaca agetgttgct gactgggaca ccattacaaa acaatctgga agagttgttt
                                                                    2940
catctgctca actttctcac ccccgagagg ttccacaatt tggaaggttt tttggaggag
                                                                    3000
tttgctgaca ttgccaagga ggaccagata aaaaaactgc atgacatgct gggggccgca
                                                                    3060
catgttgcgg cggctcaaag ccgatgtgtt caagaacatg ccctccaaga cagaactaat
                                                                    3120
tgtgtcgtgt ggagctgagc cctatgacag aagaaatact acaagttaca tcctccactc
                                                                    3180
gaaatttttg aaggcactca atggcccgag gtggtggcaa ccaggtgtct ctgctgaatg
                                                                    3240
tggtgatgga tcttaagaag tgctgcaacc atccatacct cttccctgtg gctgcaatgg
                                                                    3300
aagctcctaa gatgcctaat ggcatgtatg atggcagtgc cctaatcaga gcatctggga
                                                                    3360
aattattgct gctgcagaaa atgctcaaga accttaagga gggtgggcat cgtgtactca
                                                                    3420
tcttttccca gatgaccaag atgctagacc tgctagagga tttcttggaa catgaaggtt
                                                                    3480
ataaatacga acgcatcgat ggtggaatca ctgggaacat gcggcaagag gccattgacc
                                                                    3540
getteaatge accgggtget cagcagttet gettettget ttecactega getgggggee
                                                                    3600
ttggaatcaa tctggccact gctgacacag ttattatcta tgactctgac tggaacccc
                                                                    3660
ataatgacat tcaggccttt agcagagctc accggattgg gcaaaataaa aaggtaatga
                                                                    3720
tctaccggtt tgtgacccgt gcgtcagtgg aggagcgcat cacgcaggtg gcaaagaaga
                                                                    3780
3840
ccaaacagga gcttgatgat atcctcaaat ttggcactga ggaactattc aaggatgaag
                                                                    3900
ccactgatgg aggaggagac aacaaagagg gagaagatag cagtgttatc cactacgatg
                                                                    3960
ataaggccat tgaacggctg ctagaccgta accaggatga gactgaagac acagaattgc
                                                                    4020
agggcatgaa tgaatatttg agctcattca aagtggccca gtatgtggta cgggaagaag
                                                                    4080
aaatggggga ggaagaggag gtagaacggg aaatcattaa acaggaagaa agtgtggatc
                                                                    4140
ctgactactg ggagaaattg ctgcggcacc attatgagca gcagcaagaa gatctagccc
                                                                    4200
gaaatctggg caaaggaaaa agaatccgta aacaggtcaa ctacaatgat ggctcccagg
                                                                    4260
aggaccgaga ttggcaggac gaccagtccg acaaccagtc cgattactca qtqqcttcaq
                                                                    4320
aggaaggtga tgaagacttt gatgaacgtt cagaagctcc ccgtaggccc agtcgtaagg
                                                                    4380
gcctgcggaa tgataaagat aagccattgc ctcctctgtt ggcccgtgtt ggtgggaata
                                                                    4440
ttgaagtact tggttttaat gctcgtcagc gaaaagcctt tcttaatgca attatgcgat
                                                                    4500
atggtatgcc acctcaggat gcttttacta cccagtggct tgtaagagac ctgcgaggca
                                                                    4560
aatcagagaa agagttcaag gcatatgtct ctcttttcat gcggcattta tgtgagccgg
                                                                    4620
gggcagatgg ggctgagacc tttgctgatg gtgtcccccg agaaggcctg tctcgccagc
                                                                    4680
atgtccttac tagaattggt gttatgtctt tgattcgcaa gaaggttcag gagtttgaac
                                                                    4740
atgttaatgg gcgctggagc atgcctgaac tggctgaggt ggaggaaaac aagaagatgt
                                                                    4800
cccagccagg gtcaccctcc ccaaaaactc ctacaccctc cactccaggg gacacgcagc
                                                                    4860
ccaacactcc tgcacctgtc ccacctgctg aagatgggat aaaaatagag gaaaatagcc
                                                                    4920
tcaaagaaga agagagcata gaaggagaaa aggaggttaa atctacagcc cctgagactg
                                                                    4980
ccattgagtg tacacaggcc cctgcccctg cctcagagga tgaaaaggtc gttgttgaac
                                                                    5040
cccctgaggg agaggagaaa gtggaaaagg cagaggtgaa ggagagaaca gaggaaccta
                                                                    5100
tggagacaga gcccaaaggt aaaggtgctg ctgatgtaga gaaggtggag gaaaagtcag
                                                                    5160
caatagatct gacccctatt gtggtagaag acaaagaaga gaagaaagaa gaagaagaga
                                                                    5220
aaaaagaggt gatgcttcag aatggagaga cccccaagga cctgaatgat gagaaacaga
                                                                    5280
agaaaaatat taaacaacgt ttcatgttta acattgcaga tggtggtttt actgagttgc
                                                                    5340
```

```
actecettig geagaatgaa gagegggeag ceacagttae caagaagaet tatgagatet
                                                                 5400
ggcatcgacg gcatgactac tggctgctag ccggcattat aaaccatggc tatgcccggt
                                                                 5460
ggcaagacat ccagaatgac ccacgctatg ccatcctcaa tgagcctttc aagggtgaaa
                                                                 5520
tgaaccgtgg caatttctta gagatcaaga ataaatttct agctcgaagg tttaagctct
                                                                 5580
tagaacaagc tctggtgatt gaggaacagc tgcgccgggc tgcttacttg aacatgtcag
                                                                 5640
aagaccette teaccettee atggeeetea acaccegett tgetgaggtg gagtgtttgg
                                                                 5700
cggaaagtca tcagcacctg tccaaggagt caatggcagg aaacaagcca gccaatgcag
                                                                 5760
tectgeacaa agttetgaaa cagetggaag aactgetgag tgacatgaaa getgatgtga
                                                                 5820
ctegactece agetaceatt geoegaatte eeccagttge tgtgaggtta eagatgteag
                                                                 5880
agegtaacat teteageege etggeaaace gggeaceega acetaeceea eageaggtag
                                                                 5940
cccagcagca gtgaagatgc agactgatac cacctccacc gctgagcagt gaccttcctc
                                                                 6000
actitionet gloccagett cloccotggg ggootgagag accotoacct toottotgoo
                                                                 6060
6120
cagtggtgcc cttcctgcag aagagacatg cagcagtagc gctggcgcca tctgcaggag
                                                                 6180
ctggcgggct ggccttctgg accetggctt ctccccactg taacgcctgt tacacacaaa
                                                                 6240
ctgttgtggg ttcctgccag gcttgaagaa aatgatctga attttttcct ccttttggtt
                                                                 6300
ttattttgtt ggtttatttt gtgttttctt ttctcctttt tggggggtat tcagagtggg
                                                                 6360
ctgggcccct gggcgagaca cagctacctc tgttggcatc tttttaatac caggaaccca
                                                                 6420
gcggctctag ccactgagcg gctaaatgaa ataaagtgga aaaaaaaaa aagggaaaaa
                                                                 6480
cccaaagcct taaaaacccc cagcaaattt tttgatgaaa attgaaaaaa aaagtttcct
                                                                 6540
tgtaaaaaaa aaa
                                                                 6553
```

```
<210> 6257
<211> 3349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3090)...(1212)
<223> similar to gi6014493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6257
tttttttttt ttcatttttt aattttttat tttttttagt catttttaat qcatttttct
                                                                       60
ctgtgcacaa gagaaataac tgatgaagtc aaaagacaca ctttccttta tacatagcag
                                                                      120
ttaaaagtaa tgcaaacatc acatgacact ttcagtgaaa gttacatttc caattacaaa
                                                                      180
tcaaaatgca tattagggtc tctttatggg agaagctgag aaggaagtct taggtaaaaa
                                                                      240
gcactttcct ggcattacta cactgatcct tcaggctgca caaagattaa ggtcatatac
                                                                      300
agtcaatctg caaatgttga cacaatgtta cactgtaaat tttctgtaca attaaatgta
                                                                      360
tacttagaga taccaggata aacatttcta ctatatttta actgaacttg cctagccaac
                                                                      420
attttcactg agaagtttat caaagatgct gtaagattct acaaaattgt gagacataac
                                                                      480
tagctccaga aacatttctt gtattctttc tcattttggt tacacatatt acactcagat
                                                                      540
tetactgtaa tatttttaga tgtacagtge caattgtget tactgtactg tatacaaata
                                                                      600
tagcaaaaaa gatcaatggt ataaatctta cagcattttg ctagcaaaaa tacatgccaa
                                                                      660
agtcacaata agcaatatcg taccacaaat tagagagctt caaataattt gcttctgttt
                                                                      720
ttaatatett cattetacat taaattaeta teataggeta atgtttaaaa atgeaaataa
                                                                      780
attggacatc tgtaggacaa cacttgttca cccaactgtg aaggttgata cctgtttcca
                                                                      840
aaaatcacaa taaatgcaga ataaagagaa gtgtttgcat gcaacacttt tgaqtgaaac
                                                                      900
agcattgatt cccaccactc aaaacggcta aggaaggaaa ctaaaggaaa taaggaagga
                                                                      960
```

```
aggaaacaaa gagggagga gtggggagac aagaggaagg gaaggtagga aaaataagca
                                                                     1020
                                                                     1080
aaggagaaag ggagtgaggg aagtaggagg gagggactcc atcttaaaat gcatcatatt
agacttacaa ctagacagat ttaaaagaat caaaatgaaa gtaaagaacg attttgtgtg
                                                                     1140
tgtgtttaaa gatttaagag ccattatcaa aaataagata cattttttt ccaggtacag
                                                                     1200
                                                                     1260
aaatgtgatt acgatggctg ggagcccagc agcctttcaa tggctgcatt gatgtcgcct
cctgttgcta ttagggcctg caagtttgct tcacggttta agaaccccat tgcgttgagc
                                                                     1320
tgttccagtt gttgctgaaa tctgacttct ggattcggca gctgtggagc atttgctcca
                                                                     1380
gccagggcct gcaccatttg ctgaatgaac tgctggttgg gtccagattc tgatgtagga
                                                                     1440
ctcgtggttt cactaggtgc agcgctggac acagtaggcc ccgtggggcc accagagccg
                                                                     1500
                                                                     1560
gtggagccag ggggggctgc agggccagtg ggtcctatgg gcccaatggg gcctatgggg
                                                                     1620
gtaaaaggga ctatagggcc tatggggcct atgggggtga ctgggcctac agggcctata
                                                                     1680
geggttecca geacceccac ecceacacet ggagtgaage teggaateag geeaggtget
tcagtggcta atgtctgtag cccctgctgg atctgcatta aagcctgcat tgctcttggg
                                                                     1740
                                                                     1800
tttgacatgg ctgatagtgt gtctggattc tgcatctgct gcaggaaggc tgggagctgt
                                                                     1860
ggccgcatct gctcctgcag ctgaggattt gcagtaaaca gcgggctatt cagcatcatc
                                                                     1920
tgtgcagcca aatctggatt ctggctcagc gactgcatca tgcttctcat gtagggcgcc
                                                                     1980
qacaqcatat totgaatcag otgggggttt toagttatot gttgcagcag gototgcatg
                                                                     2040
cctggggtac taaagatgct ggcgacataa ttagcggcag caacggtgtt cccagtagca
                                                                     2100
ttgctggaac tattgccaga cccactacca gtgcttgtgg tcgtgctggt agttgcagaa
                                                                     2160
ctctgggtag ctggcggtgg tgcccatgga ttgggtagtg gatcgcaatt ttctgtgcgg
gaaggetgeg tacetteece agaggaggaa ctacteecea eggaggeaaa tggattacee
                                                                     2220
                                                                     2280
ccaaactgct cttgtgcggc attcagcatc ggctcttgaa tgtcagtgta catgcgccgt
                                                                     2340
aaagcattat agccacctgg gatgctttct agattgctaa gagccaggtc ttgatttctc
atcatctctt gcatcatggc tggattcctg gcaatttcga gtgtctgcct cattatgtct
                                                                     2400
                                                                     2460
gggttgttga gcaggtgact gatttctggg tttctctgaa tcaattgctg catctgtgga
                                                                     2520
ttagccataa tgagctgcct catcagatcg ggattcgaaa gcatgctctg aacaaaggga
ttttccatta tttggatcat catctcaggg ctggccataa gctgctgctg catctggctc
                                                                     2580
tggageteag agaagttggt cgageteaag etcaggetge taaggeetge aagteeteee
                                                                     2640
aggeteeca acceaaacgg gttgetattt gtggaaatag gtgtggagtt acteetggga
                                                                     2700
                                                                     2760
qtcqacqccq aqqtagtqtt aagtccccgc ggcattgcta ggctgcgtgg actggccctg
                                                                     2820
aggtcggttc tggcttttga tgacaaggtg aacagtcagc ccatcatgga tgccatgctg
gatcaaggta teetgatett ttaagaattt tteeggeaaa aateageaet agetgategg
                                                                     2880
                                                                     2940
tttgggattt gaagegttte gaaategett gaettaaaet getgaacega gaetgttete
gggcaccgcg aactcctctt tctctttggg agtcttcacc gtgactttga tgattttagg
                                                                     3000
                                                                     3060
ctcagceggg gcagcagceg agccttgggc cgcagcagga ccgcggggagg ggcgcggggg
                                                                     3120
geogetgate tegecattet cagecatgge ggeogeggtg acgeaggegg geagggaagg
cgcgggcggg cgaaagagag agcgcgaggg aaggaggaag gaaggaggca ccgccgcagc
                                                                     3180
gggctgggcc gggtcaggcg gggagcgcgg agcacggtac ctctgtgatg aagactgcgg
                                                                     3240
                                                                     3300
tteeetggte eteeggtgga gaaaggeetg ggegtaggee getggetgag gteteegege
teeggtetet gggeeteete egeegeegee ttgtgateeg acegegege
                                                                     3349
```

```
<210> 6258
<211> 1535
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1397)...(592)
<223> similar to gi3925830 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6258
                                                                       60
tttttttttt ttgatattaa atgttaaatt ttatttcaaa aaactatcac agcctaaagg
                                                                      120
qaaatataat ttaaqcatta agatagtaca tttcagaaaa taagctagta ttttcatgtt
                                                                      180
acattttagg tacctatcat ttgtcattcc aagagatcct tgcgttctag actctagaat
                                                                      240
taaatggggt aaagggttat gcttttaaga actataagct gaaatgattt acttcagttc
aatatagaat atttgtcagt caagataaca atcaatgtgt acaaaaattt acataacaag
                                                                      300
aggaaaaata ggcagtgcag cacctttaga aaaataatta aaagtttcat tgcatttaca
                                                                      360
                                                                      420
ggtaagtgcc acactgagaa tttacaatac agtaatttac tgcaatcaca ggggagttcc
                                                                      480
ataaagaaac aaagctctta cactccaggt tttttggaagg tgttattgga atgcttaact
gaaaccccac agaacttgta tatcccttag gattgagttg atggaaggtc ataaaaggtt
                                                                      540
                                                                      600
ttcatagcat ctattatata aaaggagttc actgcatttg gatagctggt ttagtgtctc
                                                                      660
tgacaagtgt gaagcctaga agaattactg gcttgatggt gatctttctg tatccggcaa
gacagacctt ctccacagta acaacgctgg aatatttcta gtccatgaga gccttttctc
                                                                      720
                                                                      780
ctatgettgg tacacacttg accttettte aggacaggtt tacagatett ggaccagaag
                                                                      840
tgtctagcac aacacaatcc tgaggcacag tctgatgacc ggagacaaac agaaccttct
tgtcctttgg tgtgatacat ttttgaagac aaggtggttc ttctggaata cccatccaag
                                                                      900
gtgctatgat cattaccaaa gctttcagtg atggtttcct caatttctcc tcggaaatga
                                                                      960
ttttgatcag aagacacaca tattccattt ttgcagtaat tcccggggca gcacatagcg
                                                                     1020
tgacgcatgc agcgttttcg gcgcttcctg caggcgagac agatttgcac gcccgcgtcc
                                                                     1080
cctccgcggg tgggactagc gcagtactca tcagtgccgc actcctcgtc ctctgcgcac
                                                                     1140
gggtacggct ggtagttgtc aatggtctgg tacttattcc cgcccgggta caggattccc
                                                                     1200
ggcgcggcgc tgactgcaga gccttgggtg ccccgcagcg ccgcccagcg gtgggggcag
                                                                     1260
gttcttgata gcgttggaat tgagaaccga gttcaaggtg gcgctcactc ccagcagagg
                                                                     1320
gtggccgccg agagccgccg ctaccatcgc gacaaagacc cgggtagctc ccgctgcgcc
                                                                     1380
cagagecate ateteagaag gacteaagag ggagaaagaa agagaaaatg acegteaett
                                                                     1440
                                                                     1500
tgcaagcctg ggtccccacg aaaccgtgcc ggttcggctg cagagtcagg gtccgggagc
                                                                     1535
cccctgcggt cccagagtcc tgactgcagg gagca
```

```
<210> 6259
<211> 2619
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (132)...(2237)
<223> similar to gi3002963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6259
tggaggtgcc cggatgaaca tacatcacaa tgtgaacagt ggtcatctcc agatagtaga
                                                                       60
atttcagata tgtttctttc catttttctg acagtttgaa ttttctgtaa taattaattg
                                                                      120
acttttatac aatggaaaca acttttttgt tttggaaaaa agaaagatgc tgccgctaat
                                                                      180
cagtggatga aagatgataa tatggataca aaatctattc tagaagaact tcttctcaaa
                                                                      240
agatcacagc aaaagaagaa aatgtcacca aataattaca aggaacgggc tttttgtttt
                                                                      300
gaccaaaaca aacctttcct actatgaata tgacaaaatg aaaaggggca gcagaaaagg
                                                                      360
atccattgaa attaagaaaa tcagatgtgt ggagaaagta aatctcgagg agcagacgcc
                                                                      420
tgtagagaga cagtacccat ttcagattgt ctataaagat gggcttctct atgtctatgc
                                                                      480
```

```
540
atcaaatgaa gagagccgaa gtcagtggtt gaaagcatta caaaaagaga taaggggtaa
                                                                      600
cccccacctg ctggtcaagt accatagtgg gttcttcgtg gacgggaagt tcctgtgttg
ccagcagagc tgtaaagcag ccccaggatg taccctctgg gaagcatatg ctaatctgca
                                                                      660
tactgcagtc aatgaagaga aacacagagt tcccaccttc ccagacagag tgctgaagat
                                                                      720
                                                                      780
acctegggea gtteetgtte teaaaatgga tgeaceatet teaagtacea etetageeea
                                                                      840
atatgacaac gaatcaaaga aaaactatgg ctcccagcca ccatcttcaa gtaccagtct
                                                                      900
agegeaatat gacageaact caaagaaaat etatggetee cagecaaact teaacatgea
                                                                      960
gtatattcca agggaagact tccctgactg gtggcaagta agaaaactga aaagtagcag
cagcagtgaa gatgttgcaa gcagtaacca aaaagaaaga aatgtgaatc acaccacctc
                                                                     1020
aaagatttca tgggaattcc ctgagtcaag ttcatctgaa gaagaggaaa acctggatga
                                                                     1080
ttatgactgg tttgctggta acatctccag atcacaatct gaacagttac tcagacaaaa
                                                                     1140
gggaaaagaa ggagcattta tggttagaaa ttcgagccaa gtgggaatgt acacagtgtc
                                                                     1200
cttatttagt aaggctgtga atgataaaaa aggaactgtc aaacattacc acgtgcatac
                                                                     1260
                                                                     1320
aaatgctgag aacaaattat acctggcaga aaactactgt tttgattcca ttccaaagct
tattcattat catcaacaca attcagcagg catgatcaca cggctccgcc accctgtgtc
                                                                     1380
aacaaaggcc aacaaggtcc ccgactctgt gtccctggga aatggaatct gggaactgaa
                                                                     1440
aagagaagag attaccttgt tgaaggagct gggaagtggc cagtttggag tggtccagct
                                                                     1500
gggcaagtgg aaggggcagt atgatgttgc tgttaagatg atcaaggagg gctccatgtc
                                                                     1560
agaagatgaa ttctttcagg aggcccagac tatgatgaaa ctcatccatc ccaagctggt
                                                                     1620
taaattctat ggagtgtgtt caaaggaata ccccatatac atagtgactg aatatataag
                                                                     1680
caatggctgc ttgctgaatt acctgaggag tcacggaaaa ggacttgaac cttcccagct
                                                                     1740
cttagaaatg tgctacgatg tctgtgaagg catggccttc ttggagagtc accaattcat
                                                                     1800
acaccgggac ttggctgctc gtaactgctt ggtggacaga gatctctgtg tgaaagtatc
                                                                     1860
tgactttgga atgacaaggt atgttcttga tgaccagtat gtcagttcag tcggaacaaa
                                                                     1920
gtttccagtc aagtggtcag ctccagaggt gtttcattac ttcaaataca gcagcaagtc
                                                                     1980
                                                                     2040
agacgtatgg gcatttggga tcctgatgtg gaaggtgttc agcctgggga agcagcccta
tgacttgtat gacaactccc aggtggttct gaaggtctcc caggtccaca ggctttaccg
                                                                     2100
gccccacctg gcatcggaca ccatctacca gatcatgtac agctgctggc acgagettec
                                                                     2160
agaaaagcgt cccgcatttc agcaactccc ggtcttccca ttggaaccca cttcggggaa
                                                                     2220
aaaggccaag cattgaagaa gaaattagga gtgctgataa gaatgaatat agatgctggc
                                                                     2280
ccagcatttt cattcatttt aaggaaagta gcaaggcata atgtaattta gctagttttt
                                                                     2340
aatagtgttc tctgtattgt ctattattta gaaatgaaca aggcaggaaa caaaagattc
                                                                     2400
ccttgaaatt tagatcaaat tagtaatttt gttttatgct gctcctgata taacactttc
                                                                     2460
cagcctatag cagaagcaca ttttcagact gcaatataga gactgtgttc atgtgtaaag
                                                                     2520
actgagcaga actgaaaaat tacttattgg atattcattc ttttctttat attgtcattg
                                                                     2580
tcacaacaat taaatatact accaagtaca gaaatgtgg
                                                                     2619
```

```
<210> 6260
<211> 1244
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (394)...(966)
<223> similar to gil531665 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6260
gacaatgatt tcttgcggaa cacagtgcac aggcatgagc caccagtcac agcagagccc
```

```
attegeetge tagetgagaa egaagatgtg gtggttgtag acaageette etceatteee
                                                                      120
gttcacccct gtggccgctt ccgacacaac acagttatct tcatcctagg caaggagcac
                                                                      180
caactcaagg agctacaccc cttgcatcgg cttgaccgcc ttacctcagg ggtgcttatg
                                                                      240
tttgccaaga cagctgcagt ctctgagaga attcacgagc aggttcggga ccggcagctg
                                                                      300
gagaaggagt acgtgtgccg ggtggaaggg gagttcccca ctgaggaagt gacctgtaaa
                                                                      360
gaacccatct tagtggtgtc ttacaaagta ggggtgtgcc gtgtagatcc ccggggcaag
                                                                      420
ccctgtgaga cagtgttcca gaggctaagc tacaatggcc agtccagtgt ggtacggtgc
                                                                      480
eggecactea caggeegeac acaccagatt egagteeace tteagttett gggecateee
                                                                      540
attotoaacg accocatota caactoagtt gootggggto ottotogagg coggggoggo
                                                                      600
tacattecca agacaaacga ggagttgeta egggaeetgg tageagagea eeaggeeaaa
                                                                      660
cagageetgg atgtgetaga tetetgtgag ggtgaeetgt eeceaggaet caeagaetet
                                                                      720
acggcccct cctcagagtt gggcaaggac gacctggaag agttggctgc agctgccca
                                                                      780
gaagatggag gaagtagctg aggcagcccc tcaggagttg gacacaatag ccttggcatc
                                                                      840
agagaaggca gttgaaacag atgtcatgaa tcaagagaca gacccactct gtgcagagtg
                                                                      900
ccggctggtg cgacaggatc ccttgcccca agaccttgtg atgttcctac atgccctacg
                                                                      960
ctataaaggg ccaggctttg agtacttttc accaatgcct gcctgggcac aggatgactg
                                                                     1020
gcaaaaggac tgagggtgtg gccaatggag ggattgcttc ttgggttgtg acaaggatgg
                                                                    1080
gctatagggc aagggctgac cccatgggct agtacttggg gtttctatag gaatgaggac
                                                                     1140
gggcttctaa agagacctgc tcatacttgc tacctccttc cagtgggaat ttggagactt
                                                                     1200
tttggtttgt aaatatatcc ctttttctaa catcaaaaaa aaaa
                                                                    1244
```

```
<210> 6261
<211> 5890
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (333)...(2352)
<223> similar to gi4589556 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6261
ggcacgagct tggacaggta gagtacgtgt ttacagataa aactggtaca ctgacagaaa
                                                                       60
atgagatgca gtttcgggaa tgttcaatta atggcatgaa ataccaagaa attaatggta
                                                                      120
gacttgtacc cgaaggacca acaccagact cttcagaagg aaacttatct tatcttagta
                                                                      180
gtttatccca tcttaacaac ttatcccatc ttacaaccag ttcctctttc agaaccagtc
                                                                      240
ctgaaaatga aactgaacta attaaagaac atgatctctt ctttaaagca gtcagtctct
                                                                      300
gtcacactgt acagattaac aatgttcaaa ctgactgcac tggtgatggt ccctggcaat
                                                                      360
ccaacctggc accatcgcag ttggagtact atgcatcttc accagatgaa aaggctctag
                                                                      420
tagaagctgc tgcaaggatt ggtattgtgt ttattggcaa ttctgaagaa actatggagg
                                                                      480
ttaaaactct tggaaaactg gaacggtaca aactgcttca tattctggaa tttgattcag
                                                                      540
atcgtaggag aatgagtgta attgttcagg caccttcagg tgagaagtta ttatttgcta
                                                                      600
aaggagctga gtcatcaatt ctccctaaat gtataggtgg agaaatagaa aaaaccagaa
                                                                      660
ttcatgtaga tgaatttgct ttgaaagggc taagaactct gtgtatagca tatagaaaat
                                                                      720
ttacatcaaa agagtatgag gaaatagata aacgcatatt tgaagccagg actgccttgc
                                                                      780
agcagcggag aagagaaatt ggcagctgtt ttccagttca tagagaaaga cctgatatta
                                                                      840
cttggagcca cagcagtaga agacagacta caagataaag ttcgagaaac tattgaagca
                                                                      900
ttgagaatgg ctggtatcaa agtatgggta cttactgggg ataaacatga aacagctgtt
                                                                      960
agtgtgagtt tatcatgtgg ccattttcat agaaccatga acatccttga acttataaac
                                                                     1020
```

```
cagaaatcag acagcgagtg tgctgaacaa ttgaggcagc ttgccagaag aattacagag
                                                                    1080
gatcatgtga ttcagcatgg gctggtagtg gatgggacca gcctatctct tgcactcagg
                                                                    1140
gagcatgaaa aactatttat ggaagtttgc agaaattgtt cagctgtatt atgctgtcgt
                                                                    1200
                                                                    1260
atggctccac tgcagaaagc aaaagtaata agactaataa aaatatcacc tgagaaacct
ataacattgg ctgttggtga tggtgctaat gacgtaagca tgatacaaga agcccatgtt
                                                                    1320
                                                                    1380
ggcataggaa tcatgggtaa agaaggaaga caggctgcaa gaaacagtga ctatgcaata
gccagattta agttcctctc caaattgctt tttgttcatg gtcattttta ttatattaga
                                                                    1440
atagetacce tigtacagta tittittat aagaatgigt getitateac accecagitt
                                                                    1500
ttatatcagt tctactgttt gttttctcag caaacattgt atgacagcgt gtacctgact
                                                                    1560
ttatacaaat atttgtttta cttccctacc tattctgata tatagtcttt tggaacagca
                                                                    1620
tgtagaccct catgtgttac aaaataaqcc caccctttat cqaqacatta qtaaaaaccq
                                                                    1680
cctcttaagt attaaaacat ttctttattg gaccatcctg ggcttcagtc atgcctttat
                                                                    1740
tttctttttt ggatcctatt tactaatagg gaaagataca tctctgcttg gaaatggcca
                                                                    1800
gatgttegga aactggacat ttggcacttt ggtcttcaca gtcatgqtta ttacagtcac
                                                                    1860
agtaaagatg getetggaaa eteatttttg gaettggate aaceateteg ttacetgggg
                                                                    1920
atctattata ttttattttg tattttcctt gttttatgga gggattctct ggccattttt
                                                                    1980
gggctcccag aatatgtatt ttgtgtttat tcagctcctg tcaagtggtt ctgcttggtt
                                                                    2040
tgccataatc ctcatggttg ttacatgtct atttcttgat atcataaaga aggtctttga
                                                                    2100
ccgacacete caccetacaa gtactgaaaa ggcacagett actgaaacaa atgcaggtat
                                                                    2160
caagtgcttg gactccatgt gctgtttccc ggaaggagaa gcagcgtgtg catctgttgg
                                                                    2220
aagaatgctg gaacgagtta taggaagatg tagtccaacc cacatcagca gatcatggag
                                                                    2280
tgcatcggat cctttctata ccaacgacag gagcatcttg actctctcca caatggactc
                                                                    2340
atctacttgt taaaggggca gtagtacttt gtgggagcca gttcacctcc tttcctaaaa
                                                                    2400
ttcagtgtga tcaccctgtt aatggccaca ctagctctga aattaatttc caaaatcttt
                                                                    2460
gtagtagttc atacccactc agagttataa tggcaaacaa acagaaagca ttagtacaag
                                                                    2520
cccctcccaa cacccttaat ttgaatctga acatgttaaa atttgagaat aaagagacat
                                                                    2580
ttttcatctc tttgtctggt ttgtcccttg tgcttatggg actcctaatg gcatttcagt
                                                                    2640
ctgttgctga ggccattata ttttaatata aatgtagaaa aaagagagaa atcttagtaa
                                                                    2700
agagtatttt ttagtattag cttgattatt gactcttcta tttaaatctg cttctgtaaa
                                                                    2760
ttatgctgaa agtttgcctt gagaactcta tttttttatt agagttatat ttaaagcttt
                                                                    2820
tcatgggaaa agttaatgtg aatactgagg aattttggtc cctcagtgac ctgtgttgtt
                                                                    2880
aattcattaa tgcattctga gttcacagag caaattagga gaatcatttc caaccattat
                                                                    2940
3000
gtaaagttag ccatataaat gcaagggtat atcatatata caaatcagga atcaggtccg
                                                                    3060
ttcaccgaac ttcaaattga tgtttactaa tatttttgtg acagagtata aagaccctat
                                                                    3120
agtgggtaaa ttagatacta ttagcatatt attaatttaa tgtctttatc attggatctt
                                                                    3180
ttgcatgctt taatctggtt aacatattta aatttgcttt ttttctcttt acctgaaggc
                                                                    3240
tctgtgtata gtatttcatg acatcgttgt acagtttaac tatatcaata aaaagtttgg
                                                                    3300
acagtattta aatattgcaa atatgtttaa ttatacaaat cagaatagta tgggtaatta
                                                                    3360
aatgaataca aaaagaagag cetetttetg cageegactt agacatgete tteeetttet
                                                                    3420
ataagctaga ttttagaata aagggtttca gttaataatc ttattttcag gttatgtcat
                                                                    3480
ctaacttata gcaaactacc acaatacagt gagttctgcc agtgtcccag tacaaggcat
                                                                    3540
atttcaggtg tggctgtgga atgtaaaaat gctcaacttg tatcaggtaa tgttagcaat
                                                                    3600
aaattaaatg ctaagaatga ttaatcgggt acatgttact gtaattaact cattgcactt
                                                                    3660
caaaacctaa cttccatcct gaatttatca agtagttcag tattgtcatt tgtttttgtt
                                                                    3720
ttattgaaaa gtaatgttgt cttaagattt agaagtgatt attagcttga gaactattac
                                                                    3780
ccagctctaa gcaaataatg attgtataca tattaagata atggttaaat gcggttttac
                                                                    3840
caagttttcc cttgaaaatg taattccttt atggagattt attgtgcagc cctaagcttc
                                                                    3900
cttcccattt catgaatata aggcttctag aattggactg gcaggggaaa gaatggtaga
                                                                    3960
gacagaaatt aagactttat ccttgtttgc ttgtaaacta ttattttctt gctaatgtaa
                                                                    4020
catttgtctg ttccagtgat gtaaggatat taagttatta agctaaatat taattttcaa
                                                                    4080
aaatagtcct tctttaactt agatatttca tagctggatt taggaagatc tgttattctg
                                                                    4140
gaagtactaa aaagaataat acaacgtaca atgtctgcat tcactaattc atgttccaga
                                                                    4200
agaggaaata atgaagatat actcagtaga gtactaggtg ggaggatatg gaaatttgct
                                                                    4260
cataaaatct cttataaaac gtgcatataa caaaatgaca cccagtaggc ctgcattaca
                                                                    4320
tttacatgac cgtgtttatt tgccatcaaa taaactgagt actgacacca gacaaagact
                                                                    4380
ccaaagtcat aaaatagcct atgaccaact gcagcaagac aggaggtcag ctcgcctata
                                                                    4440
```

```
atggtgctta aagtgtgatt gatgtaattt tetgtaetea eeatttgaag ttagttaagg
                                                                     4500
agaactttat ttttttaaaa aaagtaaatg gcaaccacta gtgtgctcat cctgaactgt
                                                                     4560
tactccaaat ccactccgtt tttaaagcaa aattatcttq tqattttaaq aaaagagttt
                                                                     4620
tctatttatt taagaaagta acaatgcagt ctgcaagctt tcagtagttt tctagtgcta
                                                                     4680
tattcatcct gtaaaactct tactacgtaa ccagtaatca caaggaaagt gtcccctttg
                                                                     4740
catatttctt taaaattctt tctttggaaa gtatgatgtt gataattaac ttacccttat
                                                                     4800
ctgccaaaac cagagcaaaa tgctaaatac gttattgcta atcagtggtc tcaaatcgat
                                                                     4860
ttgcctccct ttgcctcgtc tgagggctgt aagcctgaag atagtggcaa gcaccaagtc
                                                                     4920
agtttccaaa attgcccctc agctgcttta agtgactcag caccctgcct cagcttcagc
                                                                     4980
aggcgtaggc tcaccctggg cggagcaaag tatgggccag ggagaactac agctacgaag
                                                                     5040
acctgctgtc gagttgagaa aaggggagaa tttatggtct gaattttcta actgtcctct
                                                                     5100
ttcttgggtc taaagctcat aatacacaaa ggcttccaga cctqaqccac acccaqqccc
                                                                     5160
tatcctgaac aggagactaa acagaggcaa atcaacccta ggaaatactt gcattctgcc
                                                                     5220
ctacggttag taccaggact gaggtcattt ctactggaaa agattgtgag attgaactta
                                                                     5280
totgatogot tgagactoot aataggoagg agtoaaggoo actagaaaat tgacagttaa
                                                                     5340
gagccaaaag tttttaaaat atgctactct gaaaaatctc gtgaaggctg taggaaaagg
                                                                     5400
gagaatcttc catgttggtg tttttcctgt aaagatcagt ttggggtatg atataagcag
                                                                     5460
gtattaataa aaataacaca ccaaagagtt acgtaaaaca tgttttatta attttggtcc
                                                                     5520
ccacgtacag acattttatt tctattttga aatgagttat ctattttcat aaaagtaaaa
                                                                     5580
cactattaaa gtgctgtttt atgtgaaata acttgaatgt tgttcctata aaaaatagat
                                                                     5640
cataactcat gatatgtttg taatcatggt aatttagatt tttatgagga atgagtatct
                                                                     5700
ggaaatattg tagcaatact tggtttaaaa ttttggacct gagacactgt ggctgtctaa
                                                                     5760
tgtaatcctt taaaaattct ctgcattgtc agtaaatgta gtatattatt gtacagctac
                                                                     5820
tcataatttt ttaaagttta tgaagttata tttatcaaat aaaaactttc ctattttatt
                                                                     5880
aaaaaaaaa
                                                                     5890
```

```
<210> 6262
<211> 2317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (248)...(1660)
<223> similar to gi2739460 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6262
cccgggtcga cgatttcgtg aggcgagggt ggctgccgcc tgaacttttt agatctgggg
                                                                       60
eggegeggaa teegeateeg eegggagtgt gatgaageta eeetgeeteg etgeteeget
                                                                      120
tgccgccagc tgacaccgcc tgcacccagc ccgcccggga ggggagacgc cgcggggccg
                                                                      180
tgaccttggc ggaggagggc acactgataa ttcttgtatc ttgagtgtgg accaagtttt
                                                                      240
gggtgacatg gcccagggga ataattatgg gcagaccagc aacggggtgg ccgatgaatc
                                                                      300
acccaacatg ctggtgtaca gaaagatgga agacgtcata gcacggatgc aagatgaaaa
                                                                      360
aaatggaatt cctattcgta cggtcaaaag ctttctttcc aagataccta qcqtcttctc
                                                                      420
tggttcagac attgttcaat ggttgataaa gaacttaact atagaagatc cagtggaggc
                                                                      480
gctccatttg ggaacattaa tggctgccca cggctacttc tttccaatct cagatcatgt
                                                                      540
ceteacacte aaggatgatg geacetttta ceggttteaa acceectatt tttqqccate
                                                                      600
aaattgttgg gagccggaaa acacagatta tgccgtttac ctctgcaaga gaacaatgca
                                                                      660
aaacaaggca cgactggagc tcgcagacta tgaggctgag agcctggcca ggctgcagag
                                                                      720
```

```
780
agcatttgcc cggaagtggg agttcatttt catgcaagca gaagcacaag caaaagtgga
caagaagaga gacaagattg aaaggaagat ccttgacagc caagagagag cgttctggga
                                                                      840
cgtgcacagg cccgtgcctg gatgtgtaaa tacaactgaa gtggacatta agaagtcatc
                                                                      900
                                                                      960
cagaatgaga aacccccaca aaacacggaa gtctgtctat ggtttacaaa atgatattag
aagtcacagt cctacccaca cacccacacc agaaactaaa cctccaacag aagatgagtt
                                                                     1020
acaacaacag ataaaatatt ggcaaataca gttagataga catcggttaa aaatgtcaaa
                                                                     1080
agtegetgae agtetaetaa gttacaegga acagtattta gaataegaee egtttetttt
                                                                     1140
gccacctgac ccttctaacc catggctgtc cgatgacacc actttctggg aacttgaggc
                                                                     1200
aagcaaagaa ccgagccagc agagggtaaa acgatggggt tttggcatgg acgaggcatt
                                                                     1260
gaaagaccca gttgggagag aacagttcct taaatttcta gagtcagaat tcagctcgga
                                                                     1320
aaatttaaga ttctggctgg cagtggagga cctgaaaaag aggcctatta aagaagtacc
                                                                     1380
ctcaagagtt caggaaatat ggcaagagtt tctggctccc ggagccccca gtgctattaa
                                                                     1440
cttggattcc aagagttatg acaaaaccac acagaacgtg aaggaacctg gacgatacac
                                                                     1500
atttgaagat geteaggage acatttacaa actgatgaaa agtgatteat acceaegttt
                                                                     1560
tataagatcc agtgcctatc aggagcttct acaggcaaag aaaagagggg aaatctctca
                                                                     1620
cgtccaagag gttaacaagc cttgctcagt cttactaaac ggatcatctt gtagcatgaa
                                                                     1680
tgcagactgg agtcactgca cacactttgt agctcaatgt tgtgacctgg agcagaggac
                                                                     1740
attagaacaa gatgttgcat gagcaaagga cctaaattgt tatttttgtg tgtacattcc
                                                                     1800
atctccaatg gactcttccg tctcaatgcc tccattccaa actgttgtct gctttctttc
                                                                     1860
tecttetaet atgetggate tgtgtetett cetttttaae aagtteaagt gaagtaaaae
                                                                     1920
ettttettt ttteettett tetetetete teteteteaa agetteagtt agacacacag
                                                                     1980
ttcactgaaa attcagtcag tcaaaaactg gaagaactgt aaaagaaaaa agtatatatc
                                                                     2040
aataagtata catgtggctt cacatttatt aaacaataaa ttccgcacag aaagtttcat
                                                                     2100
ttcaccaatg tgtcacagtc agaaacaaac tcatgtcttc ggtctgttgt ctgtacattc
                                                                     2160
teegttaatg tttetegeat ttattttat accatattta aagaagaaac accttttact
                                                                     2220
ccaaatgtat taaagttgat cccttctctg taaatttgtg tatgtttata ttgttgtttt
                                                                     2280
atctttcatt aaaagatgtc agaatctcaa aaaaaaa
                                                                     2317
```

```
<210> 6263
<211> 6941
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (85)...(4217)
<223> similar to gi3043680 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6263
cgacctgacg aagttagtat cetetagage ggeegeetge ageteagett etecatette
                                                                       60
tgcgctgagc ctgcgacgct cctggccgac acgccggtta acgacggcgc ctggcacagc
                                                                      120
gtgcgcatcc gccgccagtt ccgcaacacc acgctcttca tcgaccaggt ggaggccaag
                                                                      180
tgggtggagg tcaagtccaa gcgcagggac atgacggtgt tcagcggcct tttcgtcggg
                                                                      240
gggctgcccc cggaactgcg cgccgcggcg ctcaagctca ccctggcctc ggtgagggag
                                                                      300
egggageeet teaaggggtg gattegtgae gtgagggtea acteetegea ggteetgeee
                                                                      360
gtggacagcg gcgaggtgaa gctggacgat gagccgccca acagcggcgg gggaaqqccc
                                                                      420
gtgcgaggcg ggcgaggagg gcgagggcgg ggtgtgcctc aacggaggtg tgtgctccgt
                                                                      480
ggtggacgac caggccgtgt gcgactgctc gcgaaccggc ttccgcggca aggactgcag
                                                                      540
ccaagaagac aacaatgtgg aaggtctggc gcacctgatg atgggcgacc aaggaaaaga
                                                                      600
```

```
agaatatatt gccacgttca aaggatctga atacttctgc tacgacttgt ctcaaaaccc
                                                                      660
cattcaaagc agcagtgatg aaataactct gtcatttaaa acccttcaga ggaatggact
                                                                      720
gatgetteae actgggaaat eggetgatta tgteaatett geeetgaaaa atggagetgt
                                                                      780
                                                                      840
ctctctggtc attaatttgg gatcaggggc ctttgaagca ctagtggagc ctgtgaatgg
                                                                      900
aaagtttaat gataatgcct ggcatgatgt gaaagtcacc aggaatctgc gtcagcactc
aggcattgga cacgctatgg tgacaatatc agtggatggg attcttacca caacgggcta
                                                                      960
                                                                     1020
cacgcaagaa gattatacca tgctggggtc tgatgacttt ttctatgttg gaggcagtcc
cagcacagcc gaccttccag ggtcaccagt cagtaacaac tttatgggct gtctcaaaga
                                                                     1080
ggttgtatat aaaaataatg atgtgaggct ggaattatct cgacttgcca agcaaggaga
                                                                     1140
tcctaagatg aagatccatg gagtggtggc atttaaatgt gagaatgttg caactttaga
                                                                     1200
cccaatcacc tttgaaaccc cagagtettt catetetttg cctaaatgga atgcaaagaa
                                                                     1260
aactggctcc atatcatttg atttccgtac aacagagcca aatggcctca tcttatttag
                                                                     1320
ccatggcaag ccaagacatc agaaagatgc caagcaccca cagatgataa aggtggactt
                                                                     1380
ctttgctatt gagatgctag atggccacct ctacctcctc ctggacatgg ggtcaggtac
                                                                     1440
tataaaaata aaagccctgt tgaagaaagt gaatgatgga gaatggtatc atgtggactt
                                                                     1500
ccagagagac ggacggtcag gtaccatttc tgtcaacacg ttgcgtactc cctacactgc
                                                                     1560
teetggtgag agtgagatte tggacetgga tgatgagttg taeetggggg ggetgeeaga
                                                                     1620
aaataaagct ggccttgtct tccccaccga ggtgtggact gctctgctca actatggcta
                                                                     1680
cgtgggctgc atcagggatt tgttcatcga tggccaaagc aaagatatcc ggcaaatggc
                                                                     1740
tgaagttcaa agtactgctg gagtgaagcc ttcctgctca aaggaaacag caaaaccgtg
                                                                     1800
cettageaac cettgeaaaa acaatggeat gtgeagggat gggtggaaca gatatgtetg
                                                                     1860
tgattgttcc ggaacaggct atcttggcag gtcctgtgag agagaggcaa cggttttgag
                                                                     1920
ctatgatggg agcatgttta tgaaaattca gctccccgta gtcatgcata cqgagqctga
                                                                     1980
ggatgtttcc ttacggttcc gatcccagcg tgcatatggc attctgatgg caaccacttc
                                                                     2040
tagagaetet getgaeaece teegeetgga getagaegea ggaegtgtga aactgaeggt
                                                                     2100
caatctagat tgtatcagga ttaactgtaa ttccagcaaa ggtcccgaga ctctttttgc
                                                                     2160
tggctataac ctcaatgata acgagtggca cacagtgcgt gtagttcggc gtggaaaaag
                                                                     2220
tttaaagtta acagtggatg accaacaggc catgacaggt caaatggcag gtgatcatac
                                                                     2280
taggctggag ttccataaca tagagactgg catcatcaca gaacgacggt atctttcttc
                                                                     2340
tgtcccctcc aacttcattg gacacctgca gagcttgaca tttaatggaa tggcatacat
                                                                     2400
tgacctgtgt aaaaatggcg acatagatta ctgtgagctt aatgccagat ttggcttcag
                                                                     2460
gaacatcata gcagatcctg tcaccttcaa gaccaaatcg agctatgttg ccttagctac
                                                                     2520
cttgcaagcc tacacttcta tgcatctttt tttccagttc aagacaacat ccctagatgg
                                                                     2580
attaattcta tataacagtg gggatggaaa tgactttatt gtggttgaat tagttaaagg
                                                                     2640
gtacttacat tacgtgtttg atttgggaaa tggtgctaac ctcatcaaag gaaqctcaaa
                                                                     2700
taaacctctc aatgacaatc agtggcacaa cgtgatgata tcaagggaca ccagcaacct
                                                                     2760
ccacactgta aagattgaca caaaaatcac aacgcaaatc accgccggag ccaggaactt
                                                                     2820
agacctcaag agtgacttat atataggagg agtagctaaa gaaacataca aatccttacc
                                                                     2880
aaaacttgta catgccaaag aaggctttca aggctgcctg gcatcagttg atttaaatgg
                                                                     2940
gacggcttcc gggacctcat ctccgatggt tcttttctt gcaacgggac agattcgagg
                                                                     3000
agagggatgt ggaaggggcc cagcacaacc tggccaagag gactcatgtt ccaatcaagg
                                                                     3060
tgtgtgcttg caacaatggg atggcttcag ctgtgactgt agtatgactt ccttcagtgg
                                                                     3120
accactetge aatgaceetg ggacgacata tatetttage aaaggtggtg gacaaateae
                                                                     3180
gtataagtgg cetectaatg acegacecag tacgegagea gacagaetgg ceataggttt
                                                                     3240
tagcactgtt cagaaagaag ccgtattggt gcgagtggac agttcttcag gcttgggtga
                                                                     3300
ctacctagaa ctgcatatac accagggaaa aattggagtt aagtttaatg ttgggacaga
                                                                     3360
tgacatcgcc attgaagaat ccaatgcaat cattaatgat gggaaatacc atgtagttcg
                                                                     3420
tttcacgagg agtggtggca atgccacgtt gcaggtggac agctggccag tgatcgagcg
                                                                     3480
ctaccetgea gggegteage teacaatett caatageeaa geaaceataa taattqqeqq
                                                                     3540
gaaagagcag ggccagccct tccagggcca gctctctggg ctgtactaca atggcttgaa
                                                                     3600
agttctgaat atggcagccg aaaacgatgc caacatcgcc atagtgggaa atgtgagact
                                                                     3660
ggttggtgaa gtgccttcct ctatgacaac ttgagtcaac agcccctgcc atgcaatcaq
                                                                     3720
agatgtecae atcaattatg gagaetaeca egaeeetgge taetageaea geeagaagag
                                                                     3780
gaaageeece gacaaaagaa eecattagee agaccacaga tgacateett gtggeeteag
                                                                     3840
cagagtgtcc cagcgatgat gaggacattg acccctgtga gccgagctca ggtgggttag
                                                                     3900
ccaacccaac ccgagccagg cggcagagag ccgtatccag gctcagcaga agtgatccgg
                                                                     3960
gagtccagca gcaccacggg tatggtcgtt gggatagtag ccgctgccgc cctgtgcatc
                                                                     4020
```

cttatcctcc	tctatgccat	gtacaagtac	agaaaccggg	atgaaggctc	atacccatgt	4080
		catccagtaa				4140
		agtgcgaaaa				4200
		caagatctta				4260
		aacttattta				4320
		aaggaaagac				4380
		aaaaacaaaa				4440
		ttactctgct				4500
		ttcataaagc				4560
		aacacaaaaa				4620
		agaagtcagt				4680
		ctttaaaagt				4740
		agtgctggct				4800
		gagagaggaa				4860
tgtgaaatat	aaggcacgtt	ttcacacaaa	atttcaaaac	aaaaacaaga	gggcatagat	4920
		atgcacgctt				4980
		gactgtgata				5040
		cttcagccat				5100
		acatcagage				5160
		gccacaatta				5220
		gatatgtatg				5280
		attetgttge				5340
		atacatatgt				5400
		tattttcaca			_	5460
		tcagatatgc				5520
						5580
		aagcaggaag				5640
		ttgagatett				
		ccttatcaaa				5700
gactactace	attgaaaact	ggttatggaa	tasatasta	totatetata	tasstatast	5760
		ttctttctaa				5820
		gaaagtaaac				5880
		actacccact				5940
		ttacatatat				6000
		attatacact				6060
		gaaggtagtg				6120
		gcattacttg				6180
		ttccaattag				6240
catettetet	gatacttag	ttgatgaaaa	aaaagccaag	aagtggcctg	gatttcagac	6300
atacagcacc	ttagaaatat	gtataattca	tagcaaatca	ccactatcta	tggttgccaa	6360
graattgttg	tgtacaaaga	aatttagtgg	cttttatga	cccagaaagt	agaaggtata	6420
aaatgaaaat	ttaatateca	ttgcttcttt	tetagatttt	cattttttt	aatttgccac	6480
		tttcttttcc				6540
ccagttaaat	aagaagggaa	gtgtaaaact	actaatttac	agcttgaagg	gtttttttt	6600
		tatctattaa				6660
		attgaataat				6720
		aatgttcctc				6780
		agcaaaatta				6840
		caatggaaaa			tagaaagaga	6900
aaatgacttg	aatcccaagt	atcttcatac	caaacatatc	a		6941

<210> 6264

<211> 4554

<212> DNA

<213> Homo sapiens <220> <221> misc_feature <222> (4312)...(1089) <223> similar to gi3882289 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

```
<400> 6264
ccggccgcgt cgactttttt tttttgcatt aagcacaata cagcaattta tttagatgct
                                                                       60
                                                                      120
taaaatgaat acaaagggaa aataaagatc acaaaattat acatactaca acagtgtgtc
atatattaga tggtataaat gaatccacca tgatggtgtt gaactaaaga taaaactaaa
                                                                      180
tatccaaaat gcagcactca ttggtttgct gcttcaacac aacacacttt tatacagatc
                                                                      240
                                                                      300
taaaaggtgt caaaattagt agctgcaaag tcaattcttg catgtgattt tagcttaaaa
gatttcagaa aacagatctg aaataccagt ttttgttttt gacagctgta atgtcaagga
                                                                      360
                                                                      420
tattcagaac aagaaaaatc ctataataca agagagtcca gatatatatc ttacgtggct
                                                                      480
ggcctctgtt gcaagattgt acaaggttat gtgcaaaaac taagtctgtc caaaaagtcc
                                                                      540
atactagege agttttgage ttttgetagg taaactagat agagegttta ttacacagea
                                                                      600
agggcaacac taaaaaaaga aatctatgat gggcacacag taacaggatc atgagcatca
cttgaatagg tctaaaagac tgtacaaata tacatttcaa ctattcagaa tgaatacatg
                                                                      660
                                                                      720
aaaaaaaatc gcttttccca aagtctacta tacacattag actggtagct tgtatgttgg
                                                                      780
ccctacacta ccatgtgaat tagtttaaca cttctcaaag acatctgacc aatcatttca
                                                                      840
cagagggaaa gaaatgttga aaaggcagat aaaataaacc tctgcttttc ctcgtgtgta
                                                                      900
ttcatgagtc accagcttat tggtttttca catttagtta ccgtgtctgt cagagaaggt
tetgaageaa gaacageetg teetgteata gaettagaaa taaccaetgg aactgeageg
                                                                      960
gccacatgcc ccacagtcca accagtactc acaaggcagt accagtgaga agacagcttt
                                                                     1020
gcagtcacac tggagatcag agttccaggc tgcagcatgt caccaacgcc agggaacctg
                                                                     1080
gcacttaggc ctgttggctg ctcagtttaa ctccggctaa gctgccatgc atgggctcag
                                                                     1140
ctactccatc agtcatgttg tcaaactgtt ccccatcctc actgtcaatt gtgctattct
                                                                     1200
                                                                     1260
gccactcaat ctgggggtta gataagcgct catcattctc agatgcattc ttccactgtg
actggtcctt agaccaaaac ccttcaactt ttccatagga actattcttc catttcaact
                                                                     1320
getetetgte accttgeatg gtageetttt ttttggeage tggettaetg eteettgeat
                                                                     1380
cttcgctttg ggaagactcg tcagaccagg ttcctggttt catttcgcag gtattgtcct
                                                                     1440
caaagtctga cacttgttgg gatccaggcc cactctcaga tggagaagca ccgtctttcc
                                                                     1500
actcaacaac atcgtcttgg tcaacctcac tatcagatgc attgtgcatt agtttggttg
                                                                     1560
gttcctcagt caaatgaata gtttcgtatt ttgaaccatc ctctttttgg tctagcttct
                                                                     1620
cctcagattc tgaagcatcc tcaggaatta ccttcagtac atgttcctct gggttatcgt
                                                                     1680
tagagatttt aggttcaact tcaaaaacag ggtcaaaagg gctaccactt tcattggatt
                                                                     1740
cttcttccaa attttcaaaa ctgtctgagg aactgtcatc ttccttccca aggttgagct
                                                                     1800
ttttgtcagc agtcttacta gcattgactc tggaatcctt ctcatcatga ttttcaaata
                                                                     1860
gcccctcagc atcaaaatcc atctcatgct tgactttatt taattctttc atgttaaacc
                                                                     1920
ccagcaacac gccaggcttg tacttttcac aatcacggac acacttcttc cttttgttac
                                                                     1980
taaaatggga agcgatgtca ctctttccaa tacccataaa ctggctgcta gcttctcaat
                                                                     2040
ttctctcctg gtgggatagg gctgtttggg tgaaatactt tgttagaaag cttttcctgg
                                                                     2100
cttcatagga atcatctica gtgacccttg gggtctaaag ctaaaacaac aggctcttca
                                                                     2160
ggcttctctt caaagaagct gggtgaatca ctatcatcat ctaactttcg ttttttcagt
                                                                     2220
aagggaaatt ccatttgctc gtaagtgcgc ttcacaggtg ccagacttgg agactgatta
                                                                     2280
agccgagagg gtgcatttgt cttatcctgg ccattttggg tctttccaac gcccctgcag
                                                                     2340
tgaactagat gcagagtgat agttgaggcg gtcatgttgc tggtatacac accaaggcaa
                                                                     2400
tggatacatt tgtaggtgag ctttttctca actggatgaa ccgtctgaat aacttggtgc
                                                                     2460
ctctctcgta agtgatgtgc aagtgcatca gatatgggtc cttttaggat tgaaaagcaa
                                                                     2520
agaggacaaa gggttttccc aacatctttt ttatagggca ctgcagcttg aggtgaactt
                                                                     2580
tttacaggga tatctgcctt ttcctgaacc tttggctgtg gctttggagg aactggagga
                                                                     2640
ttattttggg catggtaagc aacagattca gctggggcat ccctcagatt gtatgtagtt
                                                                     2700
```

```
2760
gaatctgttt taggtcccat ctcttcatca atgtgaacca tccgcatgtg tgcggccatc
                                                                   2820
ttttccacat cattgaaagt tgaacggcaa tatggacaag acagaccatg aattaacata
                                                                   2880
tggttgagca gagtatctgt gggtaaatag cgattacagt agaggcattt gctagtaaaa
                                                                   2940
ttgtgtattt tcataatgta gttggctact gctgggactt tctcagcttt atgttctttt
                                                                   3000
tegaagtgca cactatagac atttteagga aaaageteat tacagattgt acatatttte
                                                                   3060
cacttttgag ttgaggaagt gttacctggg ggagggcctg tggcagctgc agcaggtttg
                                                                   3120
gaactggact gacctaacac tetggatgee tgtgactgag agagggaagg agactttaac
                                                                   3180
tggcccgatg agagagaaga ggcattagca gactgcaggg agtatcttgc tggtgcctgg
                                                                   3240
gacctctgct ctgacccaag cccataagac cttccgtttc cacttggaag taactgcttt
                                                                   3300
acagactgag attgttgagg aatggaaact ggtgcgttgc cacctagacc cagtctcatt
                                                                  3360
gactgaccaa cactgtaacc ctggcctaca gatttgactc catagttgtt ctgctgcaga
                                                                   3420
tgaacactgg acatcatgtt gactcctgta gaatttaagt taggctttgg tattgagagt
                                                                  3480
cgattcacca tctgctgtga tggtaaagac cgggacattt ccagaagcaa gggaaccgat
                                                                  3540
ccttggtggg agtcccatgc tcttcttgtc ttgaggtttg ggagcaatta gcatcaaggg
                                                                   3600
tttggatcgg ggaaccacta catttgtgtg cccaatcatg gcagtgacct gatagcctat
                                                                  3660
acgttcatgg tcttcgatga catgctgtac caaagcttca taggactttg gcatgaaaag
                                                                  3720
gcatcgcttg cagtgaatac tactctcttc tcgggcattc gagcctaagg ggactgcccc
                                                                   3780
attgagtgat ttttctcctg cctttgctat gtaaggtgct gccacatgct gaaaatgttc
                                                                   3840
cctgtaaatg tgcttcctaa ctatttcata aagaggatct cggtaagtgc acttcttaca
                                                                  3900
gtaataaaca gcttgctcta cactgtcagc ctgcttaggt ttaaggccat catttttgtt
                                                                   3960
tttatetttg aaagtgetga ggetgetaet tggtgegetg gegtteggag catgaaatat
                                                                   4020
tttaatgtgt gtttccaaag tctttttgtc tgcattgaag gtacagtagg ggcaattaag
                                                                   4080
gagaatccta ttttcaaagt cttcactatg gacattgcgg aaatgacttt tgtaggcaga
                                                                  4140
gaagaatttt gaggaaaatg gacaagcgct gcagcagaaa ggttttgtcc gatagtcctg
                                                                  4200
gtttttcgta agtgatgggt cccacagtcc tacatcctcc catgtagtgt ttttcaaata
                                                                  4260
aaagtcatta ggttcaaatt gtttaaaatc ttctatatgt tctttacagt attccaaccc
                                                                  4320
aatgtcacta agtattttt tcacagtttt ccgggctttt cttaaactgc caagattgtt
                                                                  4380
gacaggaagt tggaacatag tttcttgact cggcctcgag gcgcgcgcgg ggccggcgtg
                                                                  4440
ctegggggee ggacagegge ggeggeggeg ggeggatgge ggeggeaegg eggtggegee
                                                                  4500
ageggggagg gegegeeegg ggeetegteg egeteegget eggeggaete egge
                                                                  4554
```

```
<210> 6265
<211> 4879
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (610)...(4879)

<223> similar to gi3882263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6265
agcggccgcg acagggccag cgagagcccc gcagctctgc cgcagctgcc gcctcgccgc 60
ggccgggccg gagtagcact gttgcgggag cgcggcctta cgaggcggcc ggagcggtgg 120
gcacagctcg gcgcggagcg tcctgtcagg cggcgccga gggcgtcgcg gactctcccc 180
gcgatgatgc cgatgatatt aactgttttc ttgagcaaca atgaacagat tttaacagaa 240
gttcctataa caccggaaac aacctgtcga gatgttgtag aattttgcat ggaacctgga 300
gaaggcagct gccatttaac tgaagtgtgg aggggaaatg aacgtcccat accctttgat 360
```

```
catatgatgt acgaacatct tcagaaatgg ggtccacgga gggaagaagt gaaatttttt
                                                                      420
                                                                      480
cttcgacacg aggactcccc aactgagaac agtgaacaag gtggccgtca gacccaagag
                                                                      540
caacgaactc agagaaatgt aataaatgta cctggagaaa aacgtactga aaatggggtt
gggaatccac gtgttgaact taccetetca gagetecaag atatggeage taggeaacag
                                                                      600
cagcagattg aaaatcagca gcagatgttg gttgccaagg aacagcgttt acattttcta
                                                                      660
                                                                      720
aagcaacagg agcgccgtca gcagcagtct atttctgaaa atgaaaagct tcagaaattg
aaagaacgag ttgaagccca ggagaacaag ctgaagaaaa ttcgtgcaat gagaggacaa
                                                                      780
gtcgactaca gcaaaatcat gaacggcaat ctgtctgctg aaatagaaag gttcagtgcc
                                                                      840
                                                                      900
atgttccagg aaaagaagca ggaagtacag actgcaattt taagggttga tcagcttagt
cagcaattgg aagatttaaa gaaaggaaaa ctgaatgggt tccagtctta caatggcaaa
                                                                      960
ttgacgggac cagcggcggt ggagttaaaa agactgtacc aagaactaca gattcgtaac
                                                                     1020
caacttaacc aggaacaaaa ttcaaaactt cagcagcaga aggaactctt aaataagcgc
                                                                     1080
aacatggagg tggccatgat ggacaagcga atcagtgaac tgcgtgaacg tctctatggg
                                                                     1140
aaaaaaattc agctgaaccg tgtgaatggc acgtcatcac cacagtcccc tctgagcaca
                                                                     1200
tegggeaggg tegetgetgt ggggeettat atecaggtte eeagtgeegg aagettteet
                                                                     1260
gtgctggggg accctataaa gccccagtct ctcagtattg cctcaaatgc tgctcatqqa
                                                                     1320
agatecaaat eegetaatga tggaaactgg eeaacattaa aacagaatte tagetettee
                                                                     1380
gtgaaaccag tgcaggtggc cggtgcagac tggaaggatc cgagcgtgga ggggtctgtc
                                                                     1440
aagcagggca ctgtctccag ccagcctgtg cccttctcag cactgggacc cacggagaag
                                                                     1500
ccgggcatcg agattggtaa agtgccacct cccatcccgg gtgtaggcaa gcagctgcct
                                                                     1560
ccaagctatg ggacataccc aagtcctaca cctctgggtc ctgggtcgac aagctccctg
                                                                     1620
gaaaggagga aggaaggcag cttgcccagg cccagtgcag gcctgccaag tcgacagagg
                                                                     1680
cccaccetge tgcccgccac aggcagcacc ccccagccag gctcctcaca acagattcag
                                                                     1740
cagaggattt ccgtaccgcc aagtcccacg tacccgccag cgggaccacc tgcatttcca
                                                                     1800
gctggggaca gcaagcctga actcccactg acagtggcca ttaggccttt cctggctgat
                                                                     1860
aaagggtcaa ggccacagtc tcccaggaaa ggaccccaga cagtgaattc aagttccata
                                                                     1920
tactccatgt acctccagca agccacacca cctaagaatt accagccggc agcacacagc
                                                                     1980
gccttaaata agtcagttaa agcagtgtat ggtaagcccg ttttaccttc gggttcaacc
                                                                     2040
tetecatege egetgeegtt tetteaeggg teaetgteea egggeaeace acageettea
                                                                     2100
gccacctttc agaaagtact gagaaagagc ctttagcagg atggccccgc cgaccccgca
                                                                     2160
gatggcagca ccgtggagag cctgccacgg ccactcagcc ccaccaagct cacgcccatc
                                                                     2220
gtgcattcgc cactgcgcta ccagagtgat gcagacctgg aggccctccg caggaagctg
                                                                     2280
gecaaegege ceeggeeest gaaaaagege ageteeatea cagageeega gggeeeegge
                                                                     2340
gggcccaaca tccagaagct gctgtaccag cgcttcaaca ccctggccgg tggcatggag
                                                                     2400
ggcacccett tetaccagee cageccetee caggaettea tggteacett ggcegatgtg
                                                                     2460
gacaatggaa acaccaatgc caatggaaac ctggaagagc tccccctgc ccagcccaca
                                                                     2520
gccccactcc ccgctgagcc tgccccgtca tcagatgcca atgataatga gttaccttcc
                                                                     2580
cccgaaccag aggageteat etgteeceaa accaeceaee aaaetgeega geeggeagag
                                                                     2640
gacaataaca acaacgtggc cacggtcccc accacggagc agatcccgag tcctgtggct
                                                                     2700
gaggeeecat etecagggga agageaggte eetecageac etetteeece tqeeaqeeac
                                                                     2760
cctcctgcca cctccacgaa caagcggacc aacttgaaga agcccaactc ggagcggacg
                                                                     2820
gggcacgggc tgagagtccg gtttaacccc ctggcactgc tcctagacgc gtctctggaa
                                                                     2880
ggagagttcg atctggtgca gaggatcatc tatgaggtgg aagatcccag caagcccaac
                                                                     2940
gacgaaggga tcaccccact gcacaacgcc gtctgcgccg gccaccatca catcgtgaag
                                                                     3000
ttcctgctgg attttggtgt caacgtgaat gctgctgata gtgatggatg gacgccgctg
                                                                     3060
cactgegetg cetettgtaa cagegtteae etetgeaaae agetggtgga gagtggtgee
                                                                     3120
gccatttttg cctcaaccat aagcgacatt gaaactgctg cagacaagtg tgaggagatg
                                                                     3180
gaggaagget acatecagtg eteccagttt etatatgggg tgeaggaaaa getgggtgtg
                                                                     3240
atgaacaaag gtgtggcgta tgctctgtgg gactacgagg cccagaacag tgacgagctg
                                                                     3300
tecttecaeg aaggggaege ceteaceate etgaggegea aggaegaaaa gegagaetga
                                                                     3360
ggtggtggtg ggctcgcctt ggagaccggg agggctatgt gcccaaaaac ctgctggggc
                                                                     3420
tgtatccacg gattcaaacc cccgacagcg aacactcgcc tgaacttcct tttggagcac
                                                                     3480
cgcatggtct tgccagctac caggagccac ttaagagatt attgtgctgt tttccaggaa
                                                                     3540
agctgcagct agaaaatggt cttaatggtg ctcactttag cagacagcgt ccacaatgtg
                                                                     3600
aatcctacag tttccaggtg aggccctttc tccagtttgc ccattaactg ggagaggtac
                                                                     3660
tttcgcctcc aaggactgaa ttttgccaat tactataaat ccaaataaat acccactttc
                                                                     3720
aaaacaccca cccctcttgc cattaagaag tcccataacc cccggttggt tgccagtgaa
                                                                     3780
```

```
gacagaaget ettactgact tggccccgag gcattcaccc cetecagcag tgaacactgt
                                                                     3840
cegeegetgt gaggeetget eeeetgegae egetetgeee eeegteaceg aateggaeae
                                                                     3900
teateettte teacaettee cacacatgat cettetteee tteateacca aaggaggeet
                                                                     3960
ctgtatggga aacatgttcc agtgttggtg gcccagtgtg tatgcctccc agtacccact
                                                                     4020
ctgctcggcc gccttggggg ttccgcttcc tgttccagtt cacctaaagg ctgattgtgc
                                                                     4080
aggeceagea etgtggetgg aetgeegege caegggeace aggaceceta agaceaagtg
                                                                     4140
acaactggga gagcctcagc atatactctt ctcctccgat ctcacagcct gtcatgctgc
                                                                     4200
tcagtgtggt tctcacccct gcaagctcaa attcagttcc ctgaatggag tcaggtgctg
                                                                     4260
gaggccgtgg cagcggaggg tggttggggt tgggctggg ggtggactgg tgtgagggca
                                                                     4320
                                                                     4380
gaccagggcc aggtagacgg ggctgtttgg tgcctgaagg atggcagacg cctggtgtca
ggaggggccg ccaccaagga gcagcagctg gggcagagga gctggggtca ggggccaccc
                                                                     4440
ctctctgccg atctccctgc ctgggctggc tgtgaggccc acctttgtcc caggcccagc
                                                                     4500
                                                                     4560
ctcaaggcaa ggagggcgct tcactgaggt gtgaattgta cgtacaggct ttttatatac
caaaagtatt ttttgactag accattcaaa gctacccgaa ctatgttgga aatttttttt
                                                                     4620
ttctcattaa aatacaggcc cttaggctct atttttcatg tatgagtcgt gtgtaattta
                                                                     4680
tgtaaaaatg tgtgtacaga ctcactgatg cagcactgta gcccatcacc ttggagcact
                                                                     4740
gactgtacat agtgtggtga agaaaagtga acgcccttgt agagcagccc gaccacagga
                                                                     4800
geatggeege tgeeageeea gaegetgetg aegetgtgta aatgtgeaca ataaaceegt
                                                                     4860
                                                                     4879
ctcaccccga aaaaaaaaa
```

```
<210> 6266
<211> 7564
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(3534)
<223> similar to gi2224581 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6266 ataatgccct gcgggagctc gagactgtta aggggatgtt ggacacatcc taatgaacct 60 gttagtgacc tetettaett tgaetgeatt gagagtgtga tggaaaaete caaggttetg 120 ggtgaatcga tggcagggat ttcacagaat gccaagaccg gagacctccc tgcctttggg 180 gaatgtgtgg ggattgcatc caaggctctc tgtgggctga cagaggctgc agcccaggct 240 gcatacttgg ttggcatctt tgatccaaac agccaggcag gccaccaggg cctggtggac 300 cccatccagt ttgccagggc taaccaggcc atccagatgg catgccagaa cttggtggac 360 cctggcagca gcccatcaca ggtcctgtca gccgccacaa ttgttgccaa gcacacgtca 420 gccttgtgta atgcctgccg catcgcctca tccaagacgg ccaacccagt agccaagagg 480 cacttegtee agteggeeaa ggaagtegee aacageactg ceaacetggt gaagaceate 540 aaggccctgg atggggattt ctctgaagac aaccgcaata agtgtcgcat cgccaccgca 600 cccttgattg aagctgtgga gaacctgaca gcgttcgcct caaaccctga gtttgtcagc 660 attectgeec agateagete egagggttee caggeacagg aaccaateet ggteteagee 720 aagcccatgc tggagagttc atcgtacctc attcgcactg cacgctctct ggccatcaac 780 cccaaagacc cacccacctg gtctgtactg gctggacatt cccatacagt gtccgactcc 840 atcaagagtc tcatcacttc tatcagggac aaggcccctg gacagaggga gtgtgattac 900 tecategatg geateaaceg gtgeateegg gacategage aggeeteget ggeegeegte 960 agccagagcc tggccacgag ggacgacatc tctgtggagg ccctgcagga gcagctgact 1020 teggtggtee aggaaategg acacettate gateceateg ceacagegge teggggagaa 1080

```
1140
gcagctcagc tgggacataa ggggacacaa ctggcaagct attttgagcc cttgatctta
                                                                     1200
gccgcagttg gtgtggcctc caagattctt gatcatcagc agcagatgac ggtgctggac
                                                                     1260
cagaccaaga ctctcgcaga gtctgccttg cagatgttgt atgcagccaa agaaggtggc
ggaaacccca aggcacaaca cacccatgac gccatcacag aggccgccca gttgatgaag
                                                                     1320
gaagccgtgg atgacatcat ggtgacgctg aacgaagctg ccagtgaagt ggggctggtt
                                                                     1380
gggggcatgg tggacgccat tgcagaagcc atgagcaagc tggatgaagg cactcctcca
                                                                     1440
gaaccaaagg gaacatttgt cgactatcag acgactgtgg ttaaatactc caaagccatt
                                                                     1500
geggtgacag etcaggaaat gatgaetaag teggttaeta aeceggagga gttgggagga
                                                                     1560
ctggcttcac aaatgaccag tgactatggg cacctggctt tccagggcca gatggcagca
                                                                     1620
gccacggcgg aaccagagga gatcggattc cagattcgca ctcgtgtgca ggacctgggc
                                                                     1680
cacggetgta tetteetggt geagaaggea gggggeeete eaggtetgee ceacagacag
                                                                     1740
ctacaccaag agggagctga tcgaatgcgc ccgtgccgtc acggaaaagg tctccttggt
                                                                     1800
getetegget etecaggeeg ggaacaaagg aacceaggea tgeattacag eegeeacege
                                                                     1860
tgtgtctggg atcattgccg acctggacac caccattatg tttgcaacag cggggacgct
                                                                     1920
gaatgcagag aacagtgaga ccttcgcaga ccacagggag aacattctca agacggccaa
                                                                     1980
ggccttggta gaagacacga aactacttgt gtcaggagct gcgtccactc ctgacaagct
                                                                     2040
ggcccaggcg gcccagtcct cagcagccac catcacccag ctcgcagaag tggtcaagct
                                                                     2100
gggggcagcc agcctgggct ccgacgaccc cgagacccag gtggttttga tcaatgccat
                                                                     2160
caaagatgtg gccaaggccc tttctgatct catcagtgct accaagggag ctgccagcaa
                                                                     2220
gccagtggac gaccetteca tgtaccaget caaggggget gccaaggtga tggtgaccaa
                                                                     2280
tgtcacctcg ctcctcaaga ctgtaaaggc agtggaggat gaggccaccc ggggcaccag
                                                                     2340
ggcgcttgag gccacaattg aatgcataaa gcaggagctt acggtgttcc agtcaaaaga
                                                                     2400
cgtacctgaa aagacatcat cacctgaaga atccataagg atgacgaaag gcatcaccat
                                                                     2460
ggcaacagcc aaagccgtgg cagctgggaa ctcatgtaga caggaggacg tgattgctac
                                                                     2520
tgccaacctg agccggaaag ccgtgtcaga tatgttgacg gcttgcaagc aagcatcctt
                                                                     2580
ccaccccgat gtcagtgacg aggtgagaac cagagccttg cgtttcggga cggagtgcac
                                                                     2640
cettggetae ttggacetee tggageaegt ettggtgatt etteagaaac caaceceaga
                                                                     2700
acteaageag cagetggeeg ettteteeaa gegagtegee ggegetgtga cagageteat
                                                                     2760
ccaggcggcg gaagccatga aaggaacaga gtgggtggat ccagaagacc caactgtcat
                                                                     2820
tgcagaaaca gagttactgg gggctgcagc atccatcgaa gctgctgcta agaagttaga
                                                                     2880
gcaactgaag ccaagagcaa aaccaaaaca agcggatgag accctggact ttgaggaaca
                                                                     2940
gatcttggaa gctgctaaat ccattgctgc tgccacaagc gccctggtca aatcggcctc
                                                                     3000
agcagcccag agggagctgg tggcccaagg aaaggtgggc tccatccctg ccaatgctgc
                                                                     3060
agacgacgga cagtggtcac aggggctgat ttctgctgcc cggatggtgg cggctgcgac
                                                                     3120
cagcagtete tgtgaggegg ccaatgeete egtteaggga caegeeageg aggagaaget
                                                                     3180
catctcatct gccaagcagg tcgccgcttc cacggctcag ctgctggtgg cctgcaaggt
                                                                     3240
gaaggccgac caggattcag aggccatgag gcggctacag gcggcaggaa atgctgtgaa
                                                                     3300
aagagcctca gacaatcttg tccgtgcagc ccagaaggca gcatttggca aagctgatga
                                                                     3360
cgacgatgtt gtagtgaaaa ccaagtttgt ggggggcatt gctcagatca tcgccgccca
                                                                     3420
ggaagaaatg ctaaagaaag agcgagaact ggaagaagca aggaaaaaac tggcccaaat
                                                                     3480
ccgccagcag cagtataagt ttttacccac cgagctgagg gaagatgagg gctaaaggtg
                                                                     3540
cgagcccaga tggcgagccc caggggatgg ccctggctga actggacaga cagtgttcct
                                                                     3600
gagaggetgg geacttaget ggaaacegee caceteeete eegggtgage etggageeet
                                                                     3660
gcgtgcttgt tctcacatct ctgtcccgtc ggcactggct gcatgatcgt gatgtcacac
                                                                     3720
ggtacaatgt cctacccaca actcctctgc cgcctcccct catgcctcac cgtgtctcag
                                                                     3780
gagagagggg tgcacgtttc atggactgtt accaacaaag aaaagtcagt attatgttgt
                                                                     3840
teteagaeae titiggetitt gitggieett etettaggee igeteetgga eetetitatg
                                                                     3900
atattgtgat agggaaaaaa atcattgacg tcatagaata ttcttcttcc tctcaggaga
                                                                     3960
agacggaagc tggagttgga catggttcat aaaagccaga aacacaaacc cgtgtggact
                                                                     4020
ccgggagggt gactcaggtc ctccttccat gtcttgagca ctggctcacc cagggggtga
                                                                     4080
aaaattcccg cccctgtttg cacgctttct tgcctccgtg tgtaagctcc ttgtacaacc
                                                                     4140
cagacccatc ttgtattttg tggcccagaa aactgaacga ttattttgtt cctccgtagt
                                                                     4200
ccaaagggca gagttgcgga aggccgtcgg ggcttggtga gcaggggctg taatacagtc
                                                                     4260
tgtggggctc cttaccctgc agaggctgtt tcagctcaca cagagttcat ccacacaaac
                                                                     4320
ccacggetee cagttgacag teagtggaat getegtetee ttagegteea gggtggggat
                                                                     4380
tetgetggaa taaagagett eeteagtgae teateettta ggteeeaege tggtttetgt
                                                                     4440
geetteagaa tggteacaag eeeggattgg aaaggatetg ettacaaace tgteeeetgt
                                                                     4500
```

```
4560
cctccaaccc aaaacgcctt ttttttctgt cttaatatcc agaaaatcta aatgcatcct
aaaatcaatt gtgaaccctt taacaaggat agtttttact tattatcaca taagacataa
                                                                     4620
                                                                     4680
gatgttttca ttttctggat gtcacacttc cagaatttca tatttttccc ctctttctt
                                                                     4740
teceetttte agageeetee cataggaagg gaagggettg aatttaceet taatetgeae
                                                                     4800
ctttagccaa ggcagtgcat ggaagatgaa tggctcgtgg ggccagaatc taatgccagg
                                                                     4860
gagcaggagt gtttgaaaga attcatagtg gggaaggtaa aagttaatgg aagtacatga
                                                                     4920
ttttcaaaac tggtaacagt taaaggcact cacceteege etetetetet etetetete
                                                                     4980
ctggggggct atcatgtctt ggactccatc cacactatag tttcaaagtt ccactgacgg
                                                                     5040
gggaaagttg gtgctttggt cctccgaaga tgtcaccttt cgaccttgcc cgatcttgtt
                                                                     5100
tcaccagact ctagcccatg tcatggtttt aaaatacata aacttctgac agcttcccat
atttataagt tacttataag tgctgcacgt attagaattt tttttttca gaccagtaaa
                                                                     5160
gttagaaaaa agacgctgta aaggaaaagc aagtgagagt atgtgtagga cactgacagt
                                                                     5220
gtgtgggcac cagttctgaa gaggaggga gctgctggag ccctagcctq ttqgggaaaa
                                                                     5280
getggeacac tettggeteg cectetttga gtggagetga tecaacacet catgeetgee
                                                                     5340
                                                                     5400
ttggccggac actgagagga ggggcacacg tgcttccaga gacactcagg agtcagaccc
caatgeteag agteacaatg tgtteatgge eteetgtaac aggaetetgg ggateceete
                                                                     5460
tgtggcccag cccaccccac cctctgctct tctatgctgt gcccagggca gctgccctct
                                                                     5520
tetgeetgtg ecceatecea teetgaaaac eeaggaceaa ggeaggggea ggeageeagt
                                                                     5580
tcttccacct tgcctcagag tcatttaaaa cctttactgc atttgatacc agaaaagcct
                                                                     5640
ccagagacaa accaaatgca aaggcctttc ctttataact ctaaagaaca ggcatcgaaa
                                                                     5700
gtttattttt gtaggagcta tataaatact cacctttctg gagtcgtcca gtgctgggag
                                                                     5760
ctttggggag attggttete agttateace tggtatggte ecagtttete atetgteett
                                                                     5820
tecteateca ecetgeacat gtgtatgtga aeggettegt ggeeggtgtg gtggtttete
                                                                     5880
atttcataag atagttgaag ggccatgcct tgtctggatg ttatttaata ggcactactg
                                                                     5940
cggtgtcctc agatggtact gagggggcct tctggtcctt caaaggaaaa taacacaggc
                                                                     6000
atgagttcat ttgggagtgt gaactttcag aacacctaat aagagagtgg tgtcagagta
                                                                     6060
aaaacggccc caggtctgga gcatagaagt gtatctctgt gaagagagag ccggtgtgtt
                                                                     6120
gacatgtggt tetteteaca eccetetaet ectegaggge tttgaateet tgggetgatt
                                                                     6180
tttgtgccag aaattgctgt tcccgatggc caaaaggqqa acctqaactq qatttcaqaa
                                                                     6240
ctgcccagtg atttgaaaat ttagatttta cttgggcctt tcaggagtct ttagataggg
                                                                     6300
atgctgaggt catatttagt tcaatgaaca gcccttgttt aagttttgcc agtgtccagc
                                                                     6360
cagetgtgge cetggecate tgtgeaggea ggtteeteaa tteetggttg geeetgeagt
                                                                     6420
cggtcaacac agtccctcca ggtcggctgc agaggcagct gcccagcctg cagtctatgc
                                                                     6480
acgggcctta agaaatgagc tgcctgtagc ctcacggcat atgcttttat cagggaaaac
                                                                     6540
cettegaget tettetgatt etcacetget tgetttetgg etgtettagt eagtgtgttt
                                                                     6600
acaggcaact aaagcctgtt cctaatttat caaaaaatta taaccaaaat tcaccatagc
                                                                     6660
ctaagagagt aaaccccacc tccaaagtga tgccaaggcc aaaacctcat caaggaacca
                                                                     6720
gacacaggte aaaagtggtg agcaagccat ggtetetget cetggggaac teacaegetg
                                                                     6780
accecegagg ageettggtt teeteeetgg cagatagtee ecagaatett eteteecage
                                                                     6840
tttgaggttc tgggctctgg aaaggcctct gggatgctgg ccttaagatc tcagcacaga
                                                                     6900
ctatcagcat gttccattct cagattcctg gaggaaaggt accctctgtt gaccaagggg
                                                                     6960
ctggctgctt ctgagactta ccaacccaag aaatttggag acattcccct caggctaaaa
                                                                     7020
ggcagcggtc cccagagttc agaaagcaaa agatcttgac aactgtgcca gtagtggctc
                                                                     7080
tggtcctatc tctccacagt gctggcctct gctggggaag gcatctttcc caaaggtatc
                                                                     7140
cccaagtacc atgttgaaaa tgtcctcagt ctgttgctcc atctttctga qcctctqctt
                                                                     7200
ggtatgtcat gtttatggtc actacggatg agtgtgtgca gagtttgggt tgattctttt
                                                                     7260
aaatgctaca aacaagagct atttctttc aataaaaaag gtttggattc ggcctcttcc
                                                                     7320
tetgagecca ceteccagec etecagggag cateagtgta cetgagteac tttgtetgea
                                                                     7380
tctcttcatc ccacaaaaca cgaggctggg tctcattcag cggcctctca ccaaccttca
                                                                     7440
agatccagaa gaaaacagga acgttcagct ctgccctgtg tcgtatctaa tcacatacat
                                                                     7500
taatttatct aaccacataa gttattttt tttatttgcc cagaaataaa cctttaaagg
                                                                     7560
aacg
                                                                     7564
```

```
<210> 6267
     <211> 770
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (359)...(773)
     <223> similar to gi4884094 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6267
cacaacttta cacctgaatg aacgccaaac ctctatggat atataaaggg aagcttgagg
                                                                       60
aggaatttca cagttacagt gcagaagcag aggcaaaaga attaaccagc tcttcagtca
                                                                      120
agcaaatcct ctactcacca tgcttcctcc tgccattcat ttctatctcc ttccccttgc
                                                                      180
atgcatecta atgaaaaget gtttggettt taaaaatgat gecacagaaa teetttatte
                                                                      240
acatgtggtt aaacctgttc cagcacaccc cagcagcaac agcacgttga atcaagccag
                                                                      300
aaatggaggc aggcatttca gtaacactgg actggatcgg aacactcggg ttcaagtggg
                                                                      360
ttgccgggaa ctgcgttcca ccaaatacat ctctgatggg ccagttgcac cagcatcagc
                                                                      420
cctctgaagg gagctggtgt gtgctgggcg agtgcttgcc cctgccagtg ctccctaact
                                                                      480
ggattggagg aggctatgga acaaagtact ggagcaggag gagctcccag ggagtgggcg
                                                                      540
qtqtttcaa tqqacaaaac ccqttaccca qaqqattccc aqttqcaqtq ccaaqatqqc
                                                                      600
                                                                      660
agcacacgca cctacaaaat cacagttagt tcattgcctg caagtgcaag aggtacaccc
                                                                      720
ggcagcacaa cgagtccagt cacaactttg agagcatgtc acctgccaag ccagtccagc
                                                                      770
atcacagaga gcggaaaaga gccagcaaat ccagcaagca cagcatgagt
     <210> 6268
     <211> 8872
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(8873)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (170)...(5244)
     <223> similar to gi1212917 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6268
cccggaattc ccgggccgac gatttcgtgc gagcggcagc agctccqqqc tcqaqaqccc
                                                                       60
gegeceatge eagtgeceat geggggeege egecagtgae geeggagagg tgtteeceee
                                                                      120
acactggggc teceactact gegaggagtg acceaegaag gecaeagaga tggeegggge
                                                                      180
ttcggtgaag gtggcggtgc gggtccgccc cttcaattcc cgggaaatga gccgtgactc
                                                                      240
```

```
300
caagtgcatc attcagatgt ctggaagcac caccaccatt gttaacccca aacagcccaa
ggagacgeec aaaagettea getttgaeta eteetaetgg tegeacaeet caeetgagga
                                                                      360
catcaactac gcgtcgcaga agcaggtgta ccgggacatc ggcgaggaga tgctgcagca
                                                                      420
                                                                      480
tgcctttgag ggatacaacg tgtgcatctt cgcctatggg cagacgggtg ccggcaagtc
                                                                      540
ctacaccatg atgggcaagc aggagaagga ccagcagggc atcatcccac agctctgcga
                                                                      600
ggacctette teteggatea aegacaegae caaegaeaae atgteetaet eegtggaggt
                                                                      660
cagctacatg gagatttact gtgagcgcgt ccgtgacctc ctgaacccca agaacaaggg
caacettege gtgagggage acceaetget ggggceetae gtggaggace tetecaaget
                                                                      720
ggctgtcacc tcctacaatg acatccagga cctcatggac tcagggaaca aggccaggac
                                                                      780
egtggeggee accaacatga atgagaccag cagtegetee caegeegtet teaacateat
                                                                      840
                                                                      900
cttcacccag aagcgccatg acgcagagac caatatcacc acggagaagg tgagcaaaat
cagectggtg gacetggetg ggagegageg ggetgaetee aegggageea agggeaegeg
                                                                      960
cctcaaggag ggagccaaca tcaacaagtc gctgaccacc ctgggcaagg tcatctccgc
                                                                     1020
cctggctgaa atggactccg gacccaacaa gaacaagaaa aagaagaaga cagatttcat
                                                                     1080
tccgtaccga gattccgtgt tgacctggct cctccgggaa aacctgggcg gtaactcaag
                                                                     1140
gacagetatg gtggcagect tgagteetge agacateaac tacgatgaga ceettageac
                                                                     1200
gctgaggtat gctgaccggg ccaagcagat ccgctgcaat gctgtcatca atgaggaccc
                                                                     1260
caacaacaag ctgatccgcg agctgaagga tgaggtgacc cggctgcggg accttctgta
                                                                     1320
cgcccagggt cttggcgaca tcactgacat gaccaatgcc ctggtgggta tgagccctc
                                                                     1380
atcotegete teagecetgt ecageegege ggeeteegtg tecageetee aegagegeat
                                                                     1440
cttgtttgcc ccgggcagcg aggaggccat tgaaagactg aaggaaacag agaagatcat
                                                                     1500
agctgagctc aatgagacct gggaggagaa gctgcggcgg acagaagcca tccggatgga
                                                                     1560
gagggaagec etgetggeeg agatgggtgt ggeeatgagg gaggatggeg geacettggg
                                                                     1620
egtattetet eccaaaaaga caccacacet egteaacetg aacgaggace egetgatgte
                                                                     1680
tgagtgcctg ctctactaca tcaaggatgg gatcaccaga gtgggcaggg aggatggcga
                                                                     1740
gaggcggcag gacattgttc tgagtgggca cttcatcaag gaggagcact gcgtcttccg
                                                                     1800
gagcgactcc aggggaggca gcgaagctgt ggtgaccttg gagccctgtg agggggcaga
                                                                     1860
cacctacgtc aatggcaaga aagtcacaga gcccagcatc ctgcgttcag gaaaccgcat
                                                                     1920
catcatgggt aagagccatg tgttccggtt caaccaccc gagcaggccc ggcaggagcg
                                                                     1980
tgagcgcacg cettgtgcgg agacgccage tgagcetgtg gactgggcet tegeccageg
                                                                     2040
tgagctgctg gagaagcagg gcatcgacat gaagcaggag atggagcaga ggctccagga
                                                                     2100
actggaggac cagtaccgcc gcgagcggga ggaggccacc tacctgctgg agcagcagcg
                                                                     2160
getggaetat gagageaage tggaggetet geagaageag atggaeteea ggtaetaeee
                                                                     2220
ggaggtgaac gaggaggagg aggagcccga ggatgaagtc cagtggacag agcgggagtg
                                                                     2280
tgagctggcg ctctgggcct tccggaagtg gaagtggtac cagttcacgt ctctgcggga
                                                                     2340
cctgctgtgg ggcaacgcca tcttcctcaa ggaggccaat gccatcagcg tggagctgaa
                                                                     2400
aaagaaggta caattccagt ttgtcctcct gacggacaca ctctactccc ctctgccacc
                                                                     2460
egacetgetg ecceeagagg eegecaaaga eegagagaag eggeeettee eeegeaceat
                                                                     2520
tgtggccgtg gaggtccagg accagaagaa cggggccacc cactactgga cgctggagaa
                                                                     2580
geteaggeag egtetggaee tgatgeggga gatgtaegae egegetgeag aggtgeeete
                                                                     2640
cagtgtcatc gaggactgtg acaacgtggt gaccggegga gaccccttct atgaccgctt
                                                                     2700
eccetggtte eggetggtgg geagggeett egtgtacetg ageaacetge tgtaceeegt
                                                                     2760
teeectggta cacegtgtgg caategteag egagaaggge gaggtgaagg getteeteeg
                                                                     2820
cgtggccgtc caggccatct cagccgatga agaggcccct gattatggct ctggcgtccg
                                                                     2880
ccagtcggga actgctaaaa tctcctttga tgaccagcat tttgaaaaagt tccagtccga
                                                                     2940
gtcttgcccc gtggtgggga tgtcccgctc gggaacctcc caggaagagc ttcgcatcgt
                                                                     3000
ggagggccag ggccagggtg cagacgtggg gccctcagcc gatgaagtca acaacaacac
                                                                     3060
ctgttcagca gtgcccccag aaggcctcct cctagacagc tctgagaaag ccgccctgga
                                                                     3120
tgggcccctg gatgctgccc tggaccacct ccgcctgggc aacaccttca ccttccgtgt
                                                                     3180
gacagteetg caggegteea geatetetge egaatatgee gacatettet gecagtteaa
                                                                     3240
etteateeae egecaegaeg aggeettete caeagageee etgaagaaea eaggeagagg
                                                                     3300
ecceccactt ggettetace acgtecagaa categeagtg gaggtgacca agteetteat
                                                                     3360
tgagtacatc aagagccagc ccattgtttt cgaggtcttt ggccactacc agcagcaccc
                                                                     3420
gttcccgccc ctctgcaagg acgtgctcag ccccctgagg ccctcgcgcc gccacttccc
                                                                     3480
tegggteatg ceaetgteea agecagtgee egecaceaag eteageacae tgaegeggee
                                                                     3540
ctgtccggga ccctgccact gcaagtacga cctgctggtc tacttcgaga tctgtgagct
                                                                     3600
ggaggccaac ggcgattaca tcccggccgt ggtggaccac cgtgggggca tgccatgcat
                                                                     3660
```

```
3720
ggggacette etectecace agggeateca gegaeggatt aeggtgacae taetgeatga
gacaggcagc catatccgct ggaaggaagt gcgcgagctg gtcgtgggcc gcatccgaaa
                                                                     3780
                                                                     3840
cactccagag accgacgagt coctgatega coccaacate ttgtctctca acatectete
ttccggatac atccacccag cccaagatga ccggaccttt taccaatttg aggctgcgtg
                                                                     3900
ggacagetee atgeacaaet eteteetget gaacegggte acceettate gagagaaaat
                                                                     3960
                                                                     4020
ctacatgaca ctctccgctt atatcgagat ggagaactgc acccagccgg ctgttgtcac
caaggacttc tgcatggtct tctattcccg tgatgccaag ctgccagcct cgcgctccat
                                                                     4080
                                                                     4140
cegeaacete tttggeagtg ggageetteg ggeeteagag agtaacegtg tgaetggtgt
                                                                     4200
gtacgagete ageetgtgee aegtggetga egegggeage eeagggatge agegeeggeg
                                                                     4260
ccgacgagtc ctggacacat ctgtggccta tgtccggggc gaggagaacc tggcaggctg
gaggccccgg agtgacagtc tcattctgga ccaccagtgg gagctggaga agctgagcct
                                                                     4320
cctgcaggag gtggagaaga ctaggcacta cctgctcctg cgggagaagc tggagaccgc
                                                                     4380
ccagcggcct gtcccggagg cactgtcccc ggccttcagc gaggactctg agtcccatgg
                                                                     4440
ctcctccagc gcctcctccc cgctctcggc tgagggccgc ccattcaccc tgggaggctt
                                                                     4500
                                                                     4560
cccaacgaga ggcagcggga gctggccgtc aagtgcttgc gcctgctcac gcacacattc
                                                                     4620
aacagagagt acacacacag ccacgtctgc gtcagtgcca gcgagagcaa gctctccgag
atgtetgtea ceetgeteeg ggaceegteg atgteecete taggggtgge caeteteace
                                                                     4680
                                                                     4740
ccctcctcca cttgcccctc tctggttgaa gggcggtacg gtgccactga cctgaggacc
                                                                     4800
eegeageeet geteeeggee ageeageeea gageeegage tgetgeeaga ggeegaetee
                                                                     4860
aagaagetee etteeeetge eegggeaaca gagacagaca aggageeeca gegeetgetg
                                                                     4920
gttccctgac atccaggaga tccgagtcag cccgatcgtt tccaagaagg ggtacctgca
cttcctggag ccgcacacgt caggctgggc caggcgcttc gtggtggtgc ggcgcccta
                                                                     4980
tgcctacatg tacaacagcg acaaggacac cgtggagcgg ttcgtgctca acctggccac
                                                                     5040
tgcccaggtg gagtacagtg aggaccagca ggctatgctc aagacaccca acacattcgc
                                                                     5100
ggtgtgcacg gaacaccgcg gcatcctgct gcaggccgcc agcgacaagg acatgcatga
                                                                     5160
etggetgtae geetteaaee eecteetgge egggaceata eggteeaage teteeagaag
                                                                     5220
gaggtetgee cagatgeggg tetgaacetg ageceteeeg tgacageegg geaggeecea
                                                                     5280
geceatecce teceteatee tegtetgace tgtcaacetg eegeceaqee ceteteetge
                                                                     5340
catacagece aegactgggt egaaceeece agggggegee catgeecagg eeeggggace
                                                                     5400
ctgtgcccac acgaaccagc tgtgctcccc ancagaggct gtgcgtgtca gttcttcttg
                                                                     5460
cagaatgtgc tctggtggaa caagttggga gaggctgggg gggccaaggg cacaggttac
                                                                     5520
gggggttett getgeegtte taatattttt ttaageatag acagaettat aattaatata
                                                                     5580
cgttagttag tgacattgaa acagtcaact cggaaattaa ctataagact tggtctattt
                                                                     5640
ataagtattt atttctaatg cctccacata gccctgtaat attcagatgg aacccccaac
                                                                     5700
cacctccacc ctgtttgttc ccacatgtgt ctcccaagcc tgctagggac aggcagggca
                                                                     5760
gggacagcca cettggaagg cegeagtgag gagetgtetg gaceagtggg geacettggg
                                                                     5820
gctagcacac gggtgtateg cctgggccc aggettetec atggccacat gggtcctggg
                                                                     5880
tgtatgtgtg ggagagtggg ggggtgtctt tggtgcctga agtctgcgcg gcatggaggg
                                                                     5940
tggtgtgagt tcctctggtg ggagggagaa cgcacatctc ttctgggcgg ccacctgagg
                                                                     6000
agtgactcca agaagagttc cggcagcttt ccccaggaaa gggtgagggg tgacactcgg
                                                                     6060
ctctggctct gagatgaggc agacggcacc caggctgtga tctgtcctgg gcggggacca
                                                                     6120
ggagggagcg gggtcgggat cacctgccag tgtgcagact ctgggactgc gtgctgtctc
                                                                     6180
cggaccatca gggtagggtg gtgggttgag accaggaagt cagggaagat cggaattcag
                                                                     6240
ggcgacggtc taggtgtcga gggctgtggc cgcagcctct tcagctgcgg cgagaaatgg
                                                                     6300
agtgagtcaa ggtagcttct gggaagaaat gctgccatta gcaggtttct tgcaaagact
                                                                     6360
ttcctctctt tgttcccagg gcagagagtt tctgtgagtc ccactgagaa aatcccatgg
                                                                     6420
ggtgggggta tcctggtcgg tcggcaatgg agggtggctg gcttggtggt tattgtcttc
                                                                     6480
aaggagetet tegetgetge atetgeggtg tecetttgtt ettgteecat tteacecet
                                                                     6540
ctgcagacac caatgtccga gggccaccca ggacaggacg ggggtcagcc ccaagctgag
                                                                     6600
agtetggtea taggagteat gtecagagge etagggaggt tttagggggee etececacee
                                                                     6660
acacccacag gtcgatttgg tctcttttt aagttcaaag ggaaagacag tagccaagca
                                                                     6720
acagagecce tetecegeeg tggeeegtgg gageagttae ategggtetg gtgeteeaga
                                                                     6780
cctagggccc agcactttca tcagatcctg cctcctggag tggggggaaac gcagcacccc
                                                                     6840
actggttctg aggcccctac cctcccaggc tgtcccacgt gatgctgaca tgagcctcag
                                                                     6900
agaccccaat cccatgcctg ggggagagac agcggctcag gagtggggga gcacgggcct
                                                                     6960
tctacaccac atgggaaggc tctggcatga ggttttcctt tgggaaggtt gtttgggccc
                                                                     7020
ctgaagttcc atctccgaga gtggtgtgca gggcaggcca gggcccatgc tggctgcagt
                                                                     7080
```

```
7140
ctctgtggct gcctgcctgg gccagcctgt ttgggagctg ggactgtggg ctcgcctttt
                                                                     7200
cgtacetggg ctcaggtgcg gtgtggccac cgccaccctc atcccctgcc tgggaggctc
                                                                     7260
tcccaggggc tgatgggggg gttctgtgag ggagaatcag ggctcgggaa gccacgcctg
ggaaggcagg acacaggaca cagcagcttt ctttggaaat ctcccaggtg aggattcaca
                                                                     7320
teccaaaata aaatteagaa geeaggtgge etgtgeteee eatgggtgae etetggagge
                                                                     7380
                                                                     7440
agtggaccaa gatgcagcaa ggagaggatg cagaacagct tcttgcagaa gcacctgctc
                                                                     7500
eggcatecag egetgeetgg aggcaggaag gagaggeagg geaggaeacg etggtetgag
                                                                     7560
atgagggga gcccacggg ccccaggcag gctagaggag gcacaggccc tgccacggcc
                                                                     7620
aactcaggtc agccagcctg aggctgtggc ctccaaaggg tctgggcgca ccccccaggt
                                                                     7680
cgcaggtgtc tgaggccagc caacctgcag agcactcgcg gcgtgggtgg gctgagtgga
ggtgcctggg agctgcctaa attcagaagc ctccactgcc atggagactg cctggctgtg
                                                                     7740
tecteteage caggtgeegt gttggeettg getaggaeee agageeaeae tgeageetee
                                                                     7800
geogaetece teetteeggg cetgetetag tgaggagtge etaageeagg acceagaaae
                                                                     7860
tcaaagttga tggtgagagg aggccgcctg agtcaggaca cctggcttct tgaaaagttc
                                                                     7920
                                                                     7980
gctctgccag aaaccaccta gggaccacgt tagctgcctt ccttgagctc cccaggagtc
ggtttccaca tctgtgaggt ggagggctgg tgtggaggtg ctcatggggt gcggtgcttg
                                                                     8040
ggagacagcc aggcccaggg tggctgctgc ttcctgctaa gtgggggagg tgagacagat
                                                                     8100
ctggaaagcc gtctccctca gatggtttca tttaatgctt tatactgccg agtctggggg
                                                                     8160
cttgttttgg tttgggggca gccatcctcc accagaaagg gggagctcct tccgctgcgg
                                                                     8220
ctccagatag atggggatgc cgggctccag gccgaccagc acttgggatc tgatgggaca
                                                                     8280
eggecagtge ctaggggtge caagtecaag geeteceact gggagteate getgagaaga
                                                                     8340
tgccaatgtt tcatccaccg gctgcacagg cacaaactcc cccacccagg acggctgtga
                                                                     8400
tgaggtggcc ctccctgtca accctggtcc ctggagtccc cagcacctgg ggccctggtg
                                                                     8460
gggctgatgt cacaggtgtt tactgtgctg ctgcactggt cctatgccag cctcacccat
                                                                     8520
gtggggacca cggaaggcac actcccttac ccccggtgcc gggccgtgcg gtcccccaga
                                                                     8580
eggacageag etgtggegae etgegtttet eeetgggeet gtgetteetg tagttagtee
                                                                     8640
gtcccctggt tcccctgtgg ctcagaggcc gcgtccctgg cttgtacata tgtgattgct
                                                                     8700
gtgggcacac cccagacccc atgtcatagc tgccgtcccg acgtcacgac gcccgtcccg
                                                                     8760
atgtettaca ceegagtgtt agecetagge teetgtactg tgegtgeact tgaggetetg
                                                                     8820
taccaattaa gaaataaatg tggctcttac tcaacacagt agaaaaaaaa aa
                                                                     8872
```

```
<210> 6269
<211> 1268
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46)...(742)
<223> similar to gi2980859 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6269
gcagttatca tagagcacag tccctcacat cacacagctg cagagatgag taaacaaaga 60
ggaaccttct cagaagtgag tctggccag gacccaaagc ggcagcaaag gaaacctaaa 120
ggcaataaaa gctccatttc aggaaccgaa caggaaatat tccaagtaga attaaatctt 180
caaaatcctt ccctgaatca tcaagggatt gataaaatat atgactgca aggtttactg 240
ccacctccca gagaagctca ctgccgaggt cctaggaatc atttgcattg tcctgatggc 300
cactgtgtta aaaacaatag ttcttattcc tttcctggag cagaacaatt tttccccgaa 360
tacaagaacg cagaaagcac gtcattgtgg ccattgtcct gaggagtgga ttacatattc 420
```

```
caacagttgt tattacattg gtaaggaaag aagaacttgg gaagagagtt tgctggcctg
                                                                      480
tacttcgaag aactccagtc tgctttctat agataatgaa gaagaaatga aatttctggc
                                                                      540
cagcatttta ccttcctcat ggattggtgt gtttcgtaac agcagtcatc atccatgggt
                                                                      600
gacaataaat ggtttggctt tcaaacataa gataaaaqac tcaqataatq ctqaacttaa
                                                                      660
ctgtgcagtg ctacaagtaa atcgacttaa atcagcccag gggggatctt caatgatata
                                                                      720
tcattgtaag cataagcttt agaagtaaag catttgcgtt tgcagtgcat cagatacatt
                                                                      780
ttatatttct taaaatagaa atattatgat tgcataaatc tgaaaatgaa ttatgttatt
                                                                      840
tgctctaata caaaaattct aaatcaatta ttgaaatagg atgcacacaa ttactaaagt
                                                                      900
acagacatcc tagcatttgt gtcgggctca ttttgctcaa catggtattt gtggttttca
                                                                      960
gcctttctaa aagttgcatg ttatgtgagt cagcttatag gaagtaccaa gaacagtcaa
                                                                     1020
acccatagag acagaaagta gaatagtggt tgccaatgtc tcagggaggt tgaaatagga
                                                                     1080
gatgaccact aattgataga acgtttcttt gtgtcgtgat gaaaactttc taaatttcag
                                                                     1140
taatggtgat ggttgtaact ttgcgaatat actaaacatc attgattttt aatcatttta
                                                                     1200
agtgcatgaa atgtatgctt tgtacatgac acttcaataa agctatccag aaaaaaaaa
                                                                     1260
gcctctga
                                                                     1268
```

```
<210> 6270
<211> 1834
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (461)...(1836)
<223> similar to gi31633 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6270 tgcccgtacg agcgcctgag ccaagcttgg cacgaaggtt aaatttttct gcatttaaaa 60 120 ctctctggca tgaagtcacc gcctatttca catccggttt gccctgggac gtattactac 180 tgtcttggta aagagaaatc ttttgttgta tagctgcaga ttggatattg ggaagcaaat 240 ttgggtgtga aatetteage aaaggageae geagagteea tgatggetea taceaagtga 300 gtgagaggca gagcgaggac gcccctttgc tctggcgcgc ccqqactcqq actcqcaqac 360 tegegetgge tecagtetet ecaegattet eteteceaga etttteeeeg gtettaagag 420 atcctgtgtc cagaggggc cttagctgct ccagcccgcg atgaggaaaa gtccaggtct 480 gtctgactgt ctttgggcct ggatcctcct tctgagcaca ctgactggaa gaagctatgg 540 acagccgtca ttacaagatg aacttaaaga caataccact gtcttcacca ggattttgga 600 cagactecta gatggttatg acaategeet gagaccagga ttgggagage gtgtaaccga 660 agtgaagact gatatcttcg tcaccagttt cggacccgtt tcagaccatg atatggaata 720 tacaatagat gtattttcc gtcaaagctg gaaggatgaa aggttaaaat ttaaaggacc 780 tatgacagtc ctccggttaa ataacctaat ggcaagtaaa atctggactc cggacacatt 840 tttccacaat ggaaagaagt cagtggccca caacatgacc atgcccaaca aactcctgcg 900 gatcacagag gatggcacct tgctgtacac catgaggctg acagtgagga gctgaatgtc 960 cgatggcatt tgggagggac ttccctatgg gatggcccat gcttgcccac taaaatttqq 1020 aagttatgct tatacaagag cagaagttgt ttatgaatgg accagagagc cagcacgctc 1080 agtggttgta gcagaagatg gatcacgtct aaaccagtat gaccttcttg gacaaacagt 1140 agactetgga attgtecagt caagtacagg agaatatgtt gttatgacca ctcattteca 1200 cttgaagaga aagattggct actttgttat tcaaacatac ctgccatgca taatgacagt 1260 gattetetea caagteteet tetggeteaa cagagagtet gtaccageaa gaactgtett 1320

```
1380
tggagtaaca actqtqctca ccatqacaac attgagcatc agtgccaqaa actccctccc
                                                                     1440
taaggtggct tatgcaacag ctatggattg gtttattgcc gtgtgctatg cctttgtgtt
                                                                     1500
ctcagctctg attgagtttg ccacagtaaa ctatttcact aagagaggtt atgcatggga
                                                                     1560
tggcaaaagt gtggttccag aaaagccaaa gaaagtaaag gatcctctta ttaagaaaaa
                                                                     1620
caacacttac gctccaacag caaccagcta cacccctaat ttggccaggg gcgacccggg
cttagccacc attgctaaaa gtgcaaccat agaacctaaa gaggtcaagc ccgaaacaaa
                                                                     1680
accaccagaa cccaagaaaa cctttaacag tgtcagcaaa attgaccgac tgtcaagaat
                                                                     1740
                                                                     1800
agcetteeeg etgetatttg gaatetttaa ettagtetae tgggetaegt atttaaacag
                                                                     1834
agageeteag etaaaageee eeacaceaca teaa
```

```
<210> 6271
<211> 6292
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6293)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1134)...(5014)
<223> similar to gi4589564 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6271 gaggacagag tgcagccttt tcctccccta atagaaaagc cattgccctc ttttcctccc 60 ctaatagaaa agccattgcc ctcttttcct ccacccttaa gaagacctgc atctgttgga 120 ccaacagaca actatecgge ttacggecag gggageceet geagetgeae agaaceagtt 180 tcttatgtat ctggcggtaa ttgggaaagc ttctgagaaa gtccatgggg ccgatgtatg 240 ggagatgaat gtggtcccgg aggcatttaa acgagggctg tgtggtgtgc tcatgtggag 300 ggatggacta cactgcatac taactgtaag caggccgaga gacccaataa ccagcagaat 360 tgtttcaaag ttttgcgatt tggcacaaag agttgtacga ctggagactg ggaccttgga 420 atcagtgtca gcccgtgatt tcaaaaagcc tagagaaacc tcttgagtgc attaaggggg 480 aagaaggtat tcaggtgagg gagatagcgt gcatccagaa agacaaagac attcctgcgg 540 aggatateat etgtgagtae tttgageeca ageeteteet ggageagget tgeeteatte 600 cttgccagca agattgcatc gtgtctgaat tttctgcctg gtccgaatgc tccaaqacct 660 gcggcagcgg gctccagcac cggacgcgtc atgtggtggc gcccccgcag ttcggaggct 720 etggetgtee aaacetgaeg gagtteeagg tgtgeeaate eagteeatge gaggeegagg 780 ageteaggta cageetgeat gtggggeeet ggageaeetg eteaatgeee caeteeegae 840 aagtaagaca agcaaggaga cgcgggaaga ataaagaacg ggaaaaggac cgcagcaaag 900 gagtaaagga tccagaagcc cgcgagctta ttaagaaaaa gagaaacaga aacaggcaga 960 acagacaaga gaacaaatat tgggacatcc agattggata tcagaccaga gaggttatgt 1020 gcattaacaa gacggggaaa gctgctgatt taagcttttg ccagcaagag aagcttccaa 1080 tgaccttcca gtcctgtgtg atcaccaaag agtgccaggt ttccgagtgg tcagagtgga 1140 geceetgete aaaaacatge catgacatgg tgteceetge aggeactegt gtaaggacae 1200 gaaccatcag gcagtttccc attggcagtg aaaaggagtg tccagaattt gaagaaaaag 1260 aaccctgttt gtctcaagga gatggagttg tcccctgtgc cacgtatggc tggagaacta 1320 cagagtggac tgagtgccgt gtggaccctt tgctcagtca gcaggacaag aggcgcggca 1380

```
accagacgge cetetgtgga gggggeatee agaceegaga ggtgtaetge gtgeaggeea
                                                                     1440
acqaaaacct cctctcacaa ttaaqtaccc acaagaacaa agaagcctca aagccaatgg
                                                                     1500
acttaaaatt atgcactgga cctatcccta atactacaca gctgtgccac attccttgtc
                                                                     1560
                                                                     1620
caactgaatg tgaagtttca ccttggtcag cttggggacc ttgtacttat gaaaactgta
atgatcagca agggaaaaaa ggcttcaaac tgaggaagcg gcgcattacc aatgagccca
                                                                     1680
ctggaggctc tggggtaacc ggaaactgcc ctcacttact ggaagccatt ccctgtgaag
                                                                     1740
agectgeetg ttatgaetgg aaageagtga gaetgggaga etgegageea gataaeggaa
                                                                     1800
aggagtgtgg tccaggcacg caagttcaag aggttgtgtg catcaacagt gatggagaag
                                                                     1860
aagttgacag acagctgtgc agagatgcca tettececat ecetgtggee tgtgatgeee
                                                                     1920
catgoccgaa agactgtgtg ctcagcacat ggtctacgtg gtcctcctgc tcacacacct
                                                                     1980
gctcagggaa aacgacagaa gggaaacaga tacgagcacg atccattctg gcctatgcgg
                                                                     2040
gtgaagaagg tggaattcgc tgtccaaata gcagtgcttt gcaagaagta cgaagctgta
                                                                     2100
atgagcatcc ttgcacagtg taccactggc aaactggtcc ctggggccag tgcattgagg
                                                                     2160
acacctcagt atcgtccttc aacacaacta cgacttggaa tggggaggcc tcctgctctg
                                                                     2220
teggeatgea gacaagaaaa gteatetgtg tgegagteaa tgtgggeeaa gtgggaeeea
                                                                     2280
aaaaatgtcc tgaaagcctt cgacctgaaa ctgtaaggcc ttgtctgctt ccttgtaaga
                                                                     2340
aggactgtat tgtgacccca tatagtgact ggacatcatg cccctctatc gtgtaaagaa
                                                                     2400
ggggactcca gtatcaggaa gcagtctagg catcgggtca tcattcagct gccagccaac
                                                                     2460
gggggccgag actgcacaga tcccctctat gaagagaagg cctgtgaggc acctcaagcg
                                                                     2520
tgccaaagct acaggtggga agactcacaa atgggcacag atgccaaatt agtccctttq
                                                                     2580
gagcgtgcaa caagacagcc cctggagcac aggaaggctg tgggcctggg cgacaggcaa
                                                                     2640
gagccattac ttgtcgcaag caagatggag gacaggctgg aatccatgag tgcctacagt
                                                                     2700
atgeaggeee tgtgeeagee ettaceeagg cetgeeagat eeeetgeeag gatgaetgte
                                                                     2760
aattgaccag ctggtccaag ttttcttcat gcaatggaga ctgtggtgca gttaggacca
                                                                     2820
gaaagcgcac tcttgttgga aaaagtaaaa agaaggaaaa atgtaaaaat tcccatttgt
                                                                     2880
atcccctgat tgagactcag tattgtcctt gtgacaaata taatgcacaa cctgtgggga
                                                                     2940
actggtcaga ctgtatttta ccagagggaa aagtggaagt gttgctggga atgaaagtac
                                                                     3000
aaggagacat caaggaatgc ggacaaggat atcgttacca agcaatggca tgctacgatc
                                                                     3060
aaaatggcag gettgtggaa acatetagat gtaacageca tggttacatt gaggaggeet
                                                                     3120
gcatcatccc ctgcccctca gactgcaagc tcagtgagtg gtccaactgg tcgcgctgca
                                                                     3180
gcaagtcctg tgggagtggt gtgaaggttc gttctaaatg gctgcgtgaa aaaccatata
                                                                     3240
atggaggaag gccttgcccc aaactggacc atgtcaacca ggcacaggtg tatgaggttg
                                                                     3300
teccatgeea cagtgactge aaccagtace tatgggteac agageeetgg ageatetgea
                                                                     3360
aggtgacctt tgtgaatatg cgggagaact gtggagaggg cgtgcaaacc cgaaaagtga
                                                                     3420
gatgcatgca gaatacagca gatggccctt ctgaacatgt agaggattac ctctgtgacc
                                                                     3480
cagaagagat gcccctgggc tctagagtgt gcaaattacc atgccctgag gactgtgtga
                                                                     3540
tatctgaatg gggtccatgg acccaatgtg ttttgccttg caatcaaagc agtttccggc
                                                                     3600
aaaggtcagc tgatcccatc agacaaccag ctgatgaagg aagatcttgc cctaatqctq
                                                                     3660
ttgagaaaga accetgtaac etgaacaaaa actgetacca etatgattat aatgtaacag
                                                                     3720
actggagtac atgtcagctg agtgagaagg cagtttgtgg aaatggaata aaaacaagga
                                                                     3780
tgttggattg tgttcgaagt gatggcaagt cagttgacct gaaatattgt gaagcgcttg
                                                                     3840
gcttggagaa gaactggcag atgaacacgt cctgcatggt ggaatgccct gtgaactgtc
                                                                     3900
agetttetga ttggteteet tggteagaat gtteteaaae atgtggeete acaggaaaaa
                                                                     3960
tgatccgaag acgaacagtg acccagecet ttcaaggtga tggaagacca tgecetteee
                                                                     4020
tgatggacca gtccaaaccc tgcccagtga agccttgtta tcggtggcaa tatggccagt
                                                                     4080
ggtctccatg ccaagtgcag gaggcccagt gtggagaagg gaccagaaca aggaacattt
                                                                     4140
cttgtgtagt aagtgatggg tcagctgatg atttcagcaa agtggtggat gaggaattct
                                                                     4200
gtgctgacat tgaactcatt atagatggta ataaaaatat ggttctggag gaatcctgca
                                                                     4260
gccagccttg cccaggtgac tgttatttga aggactggtc ttcctggagc ctgtgtcagc
                                                                     4320
tgacctgtgt gaatggtgag gatctaggct ttggtggaat acaggtcaga tccagaccgg
                                                                     4380
tgattataca agaactagag aatcagcatc tgtgcccaga gcagatgtta gaaacaaaat
                                                                     4440
catgttatga tggacagtgc tatgaatata aatggatggc cagtgcttgg aagggctctt
                                                                     4500
ecegaacagt gtggtgtcaa aggtcagatg gtataaatgt aacagggggc tgcttggtga
                                                                     4560
tgagccagcc tgatgccgac aggtcttgta acccaccgtg tagtcaaccc cactcgtact
                                                                     4620
gtagcgagac aaaaacatgc cattgtgaag aagggtacac tgaagtcatg tcttctaaca
                                                                     4680
gcaccettga gcaatgcaca ettateeeeg tggtggtatt acceaceatg gaggacaaaa
                                                                     4740
gaggagatgt gaaaaccagt cgggctgtac atccaaccca accctccagt aacccagcag
                                                                     4800
```

```
gacggggaaq gacctggttt ctacagccat ttgggccaga tgggagacta aagacctggg
                                                                   4860
tttacggtgt agcagctggg gcatttgtgt tactcatctt tattgtctcc atgatttatc
                                                                  4920
                                                                  4980
tagcttgcaa aaagccaaag aaaccccaaa gaaggcaaaa caaccgactg aaacctttaa
                                                                  5040
ccttagccta tgatggagat gccgacatgt aacatataac ttttcctggc aacaaccagt
                                                                   5100
ttcggctttc tgacttcata gatgtccaga ggccacaaca aatgtatcca aactgtgtgg
attaaaatat attttaattt ttaaaaatgg catcataaag acaagagtga aaatcatact
                                                                   5160
                                                                   5220
gccactggag atatttaaga cagtaccact tatatacaga ccatcaaccg tgagaattat
                                                                   5280
aggagattta gctgaataca tgctgcattc tgaaagtttt atgtcatctt ttctgaaatc
                                                                  5340
taccgactga aaaaccactt tcatctctaa aaaataatgg tggaattggc cagttaggat
gcctgataca agaccgtctg cagtgttaat ccataaaact tcctagcatg aagagtttct
                                                                  5400
accaagatct ccacaatact atggtcaaat taacatgtgt actcagttga atgacacaca
                                                                   5460
ttatgtcaga ttatgtactt gctaataagc aattttaaca atgcataaca aataaactct
                                                                   5520
aagctaagca gaaaatccac tgaataaatt cagcatcttg qtqqtcqatq qtaqatttta
                                                                   5580
ttgacctgca tttcagagac aaagcctctt ttttaagact tcttgtctct ctccaaagta
                                                                   5640
agaatgctgg acaagtacta gtggtcttag aagaaccgag tcctcaagtt cagtatttta
                                                                   5700
tagtgggtaa ttgtctggga aaactaattt acttggtggt taatacaata cggtttccta
                                                                   5760
ctttccctga ttttcaaact ggttgcctgc atcttttttg ctatatggaa ggccacattt
                                                                   5820
ttggcaccta tattaggtgc cagcacgata ggcgccttaa cccagtattg ccataggaaa
                                                                   5880
ctggcctctn ttttcatgtg ggatgaagac atctgtgcca agagtggcat gaagacattt
                                                                   5940
gcaagttett gtateetgaa gagagtaaag tteagtttgg atggcagcaa gatgaaatea
                                                                  6000
gctattacac ctgctgtaca cacacttcct catcactgca gccattgtga aattgacaac
                                                                  6060
atggcggtaa tttaagtgtt gaagtcccta accccttaac cctctaaaag gtggattcct
                                                                  6120
ctagttggtt tgtaattgtt ctttgaaggc tgtttatgac tagattttta tatttgttat
                                                                  6180
ctttgttaag aaaaaaaag aaaaaggaac tggatgtctt tttaattttg agcagaagga
                                                                  6240
6292
```

```
<210> 6272
<211> 3963
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3706)...(827)
<223> similar to gi5817157 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6272
ttttttttt ttacgctgca aacattttaa tgattattgt tgagcataca ttttggaaat
                                                                 60
tttttacttc aaacggcaac aagttaaata aatgtttata atatacaaag aaaatacaac
                                                                120
cgaaagtaaa actcgctgta agtgtgcctt gcacttagac caggttttcc ccccttaata
                                                                180
catctttatt tttgagctgc aaacacactt aagactttga tcttcatagt atggcattta
                                                                240
ggaaataaaa atatactccc accttaaaga aataaaaagt ttggtgcatg attatatgcc
                                                                300
aaacaaagag agaacactag aatactcttg atagtgcagg catcattaaa aaggaaaaga
                                                                360
aaaagettga gatgeteatt aattetetat gttttaagga ageaggattt ttgaeeaagt
                                                                420
agcttaaaag ccagcaaaac agggatcagt gacagcaact gtagtgtatg gagtatgaaa
                                                                480
tgacaaactt tacacaaata cactgttaga aatttaccag tgaacactga agatctgaga
                                                                540
agetgetett tggaacagte aagtgggace acettattee agteacataa gecettgtaa
                                                                600
660
cattagcagc taaaaaactt attccacatg ttcttaaagc cttaatggtg gaaaaaaagg
                                                                720
```

```
780
caaqtqtcat taqcatqqtq qatcatatac ttctctqcac acaaacacaa gaggcttcac
                                                                      840
tagtattttt aaagtetetg atgteteeca ttgeacttea aageteaatt gagatgaaag
                                                                      900
cettteteca ttgtageage tageaggege teteteatga tetectegga agaatattea
                                                                      960
ggcaacttaa ggtaatgcac acatgtattg actgatggat agcttgcatc agtagcatca
                                                                     1020
accttgcgta caaccgtgag cctgggatgc aggttagcca gtccacctgg gggtagagtt
                                                                     1080
gaacaaccag tggtaaactg caagaatgct ttcctttcat cagaagacat gccacataaa
                                                                     1140
acceteacaa aceteaggaa aceagggetg teacgtgtat aacceagett aggtteagtg
                                                                     1200
taattgataa tateetetge tgeeeaggat ggtgaetggt tteeacaaag aateatttgg
acttetteat ggetgaagga acttaattte tecattggaa aaactttatt aaacceatet
                                                                     1260
                                                                     1320
ctaaaggctt ccatttgttt ctgaataccc gtatgcatac aaaagtcaaa catcaaatcc
                                                                     1380
acatattett etgeattate eattgttate ateteatett caccaettgg ettgagatee
acagetgtaa aaceatatat tettgaggaa gggeaaaaet ggaaatttaa aeetaaatee
                                                                     1440
                                                                     1500
tetatgetaa gtggaggeee agaacetgat ggattettea geactagtte etgtaatttt
gtgttcttct catcttcaga aagacctttg ttgcttaaaa tttggcgcct cttgatagca
                                                                     1560
aggtetttaa tttettttaa aaatetgget etgtgtgggt ttaetaatte aaagtettee
                                                                     1620
caagtcaaaa ttccattaaa ccaagctggg ggttttggtt tagggggatc aagaataaat
                                                                     1680
totgattttg aatoctotto aaagottoot accgagagtg aatoatgaco ttottotgta
                                                                     1740
gaagetteag actgaettte agtacagtgt aagtetetat cacetegtga etcataaate
                                                                     1800
agtttactca tattgctttt aatgtcaccc atacacataa gtttaaaaaa aggtttagaa
                                                                     1860
ataggtaagt ccacaagtct attgtcttga atgcatttgg ccaagaaaat tccaaggaaa
                                                                     1920
tgaaacagtt tcgtgatcct ttcaagctca tcactatcct gtggaaatgg tgctgtgaac
                                                                     1980
agtecacatg acetetgeae ataatateea ggaggtttea atecacetee aagateaaeg
                                                                     2040
tgacgagatt catcatctgg aaaattatca tcacaaagcc aagctcccaa gtcagttctc
                                                                     2100
tggaattetg etgecaccag agcataaaac tetaatgtgg gteccaagee agtteettet
                                                                     2160
tctcctaaaa attcaacctc aagaactgat ttccgatctg catgtatttg catgacattc
                                                                     2220
teageceatt ceateagtga etegecaegt ggaaetttta etettteatg ettgagaega
                                                                     2280
ccaactegaa actetecagg gteatetege etaacaetge ttgtggttet egttegetee
                                                                     2340
acagtggctt cacgtcggtt ctgtaaccat actattgctc ttgaggcgcc aaatgctgta
                                                                     2400
catgtgaaat aaagctgtct agtttcaaat ggtattagaa aaggacattt gctggttaat
                                                                     2460
tgttcacacc agtctggcag agccccactt gccagtgcca atggttcctc aatctgctgt
                                                                     2520
aatatttttg ttgtaatttt ttgctagtga attcatctgg tggaaaagta aactgaggct
                                                                     2580
gttcatcacc atcttcctgg gatattcttg aataagggtc acttgcaact atatatagaa
                                                                     2640
tacgcagaag ctgaaggaca tcttctactc cacaagagtt ctgtccattg cctgctttgg
                                                                     2700
cctgaggttg ttcttttgtt aaattaagaa tatcactact ttgaagagta gaaatggccc
                                                                     2760
cctggtttaa cccagacttt tgttccatgc tcaccccaaa tcccaatatg cagctatgag
                                                                     2820
ctgagaacaa tttctgtttt tcctaatact tttattagtg ccagttaatt tccagtggcg
                                                                     2880
caggaaagca gcgtctgcat tcttctgcag gtaggttatc aagtcattct ttggtaattc
                                                                     2940
atcagtgcca aggtactgct ccacatgctc tatagaccag caacccattt ttccattttc
                                                                     3000
cttttcttta tcagaatcct tcatttctct gtacatgatt gtgtatgtgg gctcccaaat
                                                                     3060
acgcctaagt ttatctgatt tcacattgcc attacaggac aattgaagca atttttgtac
                                                                     3120
atagtaaaag atggttgatc tgaaattggt gagtggtaat tcaacttcac gagtcgttcc
                                                                     3180
aagacctgtt actttcaaag tgagagctaa tcgaggtgac ggagtacatt cqacttcttc
                                                                     3240
caagagetet gaatgagggg teeetggggg tggtatttet agateagttg tetgetggae
                                                                     3300
attagtacga ccaggtctag gatcaaaagc aggaaccaat gcagaaaact gtctctttag
                                                                     3360
cacataatca tcatcccatg ttctccggcg tcctccttta gtttcgtact cttcttcttc
                                                                     3420
ctgctcccca ataggtcggc tccctgctcc agcaggtacc tgtggtagct gcgaggtaac
                                                                     3480
agcatgatgc gttacatcag agcgggagcc agctcgacgt tgcagggatg ggcgtctcag
                                                                     3540
aatcataacc tectegtatt ettggteete etgattgtea tetteattet cateatette
                                                                     3600
ttcatctggc tcaggtaagt cctcatcatc atcgagctca gccaatagag tactggcacg
                                                                     3660
gcagctatca aggaaatcat ataaggaata ttctgcttcc tgacctgtgt cactctcact
                                                                     3720
ggaagttgat gtgaggctgg tggttaaagt gttacttaaa gattgaccaa ctgataaaac
                                                                     3780
tgttgttgct gtagctacat tgctgctgct agtaacactg gatgttgaca tagtcactgt
                                                                     3840
tgatgtagta ccaggtgtgg tcaaattagg gaaactctga gcacccataa gaggagaagt
                                                                     3900
tgctgtgctc atcacattcc tccccaaagt attagtgttg ttatcactgc tgcttcqqct
                                                                     3960
tag
                                                                     3963
```

```
<210> 6273
<211> 2358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46)...(1320)
<223> similar to gi5919219 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6273 tttcgtgtga cttcgggctg tgggctcgct cgcggctctt cggccatggt tttctcaaac 60 aatgatgaag geettattaa caaaaagtta eecaaagaac ttetgttaag aatattttee 120 ttcttggata tagtaacttt gtgccgatgt gcacagattt ccaaggcttg gaacatctta 180 gccctggatg gaagcaactg gcaaagaata gatctttta actttcaaac agatgtagag 240 ggtcgagtgg tggaaaatat ctcgaagcga tgcggtggat tcctgaggaa gctcagcttg 300 cgaggctgca ttggtgttgg ggattcctcc ttgaagacct ttgcacagaa ctgccgaaac 360 attgaacatt tgaacctcaa tggatgcaca aaaatcactg acagcacgtg ttatagcctt 420 480 agcagattct gttccaagct gaaacatctg ggatctgacc tcctgtgtgt ctattacaaa 540 cageteettg aaggggatee agtgaggget geegaaacet ggagtacetg aacetetett 600 ggtgtgacca gatcacgaag gatggcatcg aggcactggt gcgaggttgt cgaggcctga 660 aagccctgct cctgaggggc tgcacacagt tagaagatga agctctgaaa cacattcaga attactgcca tgagcttgtg agcctcaact tgcagtcctg ctcacgtatc acggatgaag 720 gtgtggtgca gatatgcagg ggctgtcacc ggctacaggc tctctgcctt tcgggttgca 780 gcaacctcac agatgcctct cttacagccc tgggtttgaa ctgtccgcga ctgcaaattt 840 tggaggetge eegatgetee catttgactg acgeaggttt tacaetttta geteggaatt 900 gccacgaatt ggagaagatg gatcttgaag aatgcatcct gataaccgac agcacactca 960 tecagetete catteactgt cetaaactge aagecetgag cetgteccae tgtgaactea 1020 tcacagatga tgggatcctg cacctgagca acagtacctg tggccatgag aggctgcggg 1080 tactggagtt ggacaactgc ctcctcatca ctgatgtggc cctggaacac ctagagaact 1140 gccgaggcct ggagcgcctc gagctgtacg actgccagca ggttacccgt gcaggcatca 1200 ageggatgeg ggeteagete ceteatgtea aagteeaege etaetttget eeegteaeee 1260 caccgacage agtggcagga agtggacage gactgtgcag gtgctgtgte attctctgac 1320 agcagetgee tgggeecaag gggtgatgag geateettte etetagaaga eetgagtett 1380 cctgaccgac tccaccatca cccaatctgt tgattctcca ttgggaaagg catttacagg 1440 taaaagactt ctgtatggat tgcagttact ctggtgatag ttttcacctt tattctgctg 1500 tgaaacaatc aaatcaaagc cttgtgtcag ttaacacatg acaagtggtc tcaatgcagc 1560 taggaccatg ccagaaacct ggatctctta agagattggt acctacctag gtacgaaagt 1620 tetaceettg geatacteag catteeteaa aaagaceate agtgttagea caaactgage 1680 agaaaaaata agctgttgat tttctacctg atacttaagc cagtggccta ctttaattca 1740 caattccatt ttgattagca ggacttttcc actttgaaga taaatagcaa ctttatcaaa 1800 gtgactgtac tgcaaattaa ttcataatgc ctgatagttt tatatataga gacttatgtg 1860 gaaggcatgt taataggttt ccatgagaca ccaaagaaaa gaggactcta tactgggtgg 1920 agcagggtct tcaccttttt gtttctgtca acttgtcata tacacctcca gggaccaaaa 1980 acaaaagcag ctcggagtct gtgttgcctg attggaaagt agaagctctg gtgtatgcta 2040 cagcacataa cacattttta ctaaaggaaa aaagctaatt atgtccatgc ctctcgtaaa 2100 actgggggga accttaaaga gaaagaacta aggcttaagt tatctgtagt ataatcaatt 2160 agaagtaatg aatggatgca tgtaaaatgg atgtgatttt tttttcaagc ttattttgaa 2220 atcttaaaaa ttcaggttac accatagcta ctcaaaagtt ttacacactt aaaactcaga 2280 tcagtaagtg ttggtacctt ttagactcat aaaattgaat aaaccgattg caatgcttta 2340

aaaaaaatta aaaaaaaa 2358

```
<210> 6274
<211> 1837
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1838)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1015)...(710)
<223> similar to gi2852636 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6274 ttttttttt ttgactggac ttcattttt ttaatagata tagatataga tttatattta 60 tatataaaat agttttttac aaaaaaatca accaaacaaa aaattaaaat caacttaaaa 120 aaacaacaac caaacaacaa taacaaaatt caaacaggag cagagatggg gctgaggcat 180 aggggaggcc cctagcgctg ccctgaggag gagggggtga gaggctgagg cactcagtct 240 cccttctgct tgggtgcttg cacagtccca ttggccagag cagtggggtt gcctggggat 300 gaggcatttg gtgtctggga ggtgcctcga gaggtgtgtg gggggcgcag gtaggtgctg 360 aagagtttcc catagagtgg gtcatggagg gagaagttct ggaactgaca gagggagagg 420 cettggetgg atcetgeetg geacagetea geatgeaaag etgtggeage agggtggggt 480 gaacccagca gcaggtgcag gatggtgctg aagccgtctt tgtacagcag gcggttggga 540 ccctetgett getetteage aaagagetea aaggeeagae gagttagete tteeaggete 600 ctgcccccat ccagagctgc tagtgcaagg gccacatctc ggaagtccac caaacccttg 660 gtatcctgct ggaagtagcc aaaggcacca gccaccgtct gaggatcaga gagctgtagc 720 tgcctggcaa actcttcctg gctgatcatt cgactccggc ctggctctgc cccagcgtcc 780 acatagccag cggacagccc agccttccga agcacttttc ccagttccca gagctgtggt 840 tecaaegeea cetteageeg geecaecaea ateaeaggta ageteeetae aaaeteaeat 900 teggtggetg gaatgeecag ageetgtgee atgaceetet gaacattgtt ggeatagagg 960 gtggggtccc tgctctcctc agggctgggg tgatacacag gaaggaactc cacatccaca 1020 atgctgcagg gctgagaggc tgtgagccag aggactttga gtactccagg acccctccat 1080 gcccagctgg tggtgtccag actgttgggg tagcggatga ggacaggctg cacaggcacc 1140 cctgcgatga aggctcccta aatccccatt tctggtttga acttaagcaa agccttcttg 1200 ttggaacagg tgccctcagg aaagaatagc acctgcggcc acttgcctcc tgaggtggcc 1260 cgccttcgga cctcctccac cactctgcgt cgagaagccg ggtcatgccg ggataccagg 1320 atggcttggt tgaatcgaag aagggctcca atgacaggaa cggaaaggtt ctcagctcgg 1380 gacacaactt tgggcaggtc acagggcagc agaacaatgg ggtcaaagaa agtggagtgt 1440 ggggcagcaa caaggacagg ggcttgaagg cgagaggctc gctggccacg aacgcgaatc 1500 cggaggaagc ccagcaggaa aaacagcagg cggctcaggc ctagcacccc gttgtggcac 1560 acagtettee tecateetgt aattggetee tgaagetget ceteactaag aceggeeact 1620 tgaagccagg caaagggcca gaggagaaag aggacgataa aggccagaag cactcggatg 1680 ggggccagca atgcccccag gaggcagaac tttgccaggg ctcaaatggc cccattttcc 1740 tatecteacg ggteetteeg acgeeegete eccacacace tegtgeeaag ettggegtaa 1800 tgaggtcaaa cagtnctcat nntcatnccc ccccqcq 1837

```
<210> 6275
<211> 3096
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3097)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (295)...(60)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6275
gcgctgtggc tcatgcctgt agtcccagca ctttgggagg ccaaggcagg ggggatcgcc
                                                                       60
tgaggtcagg agtttgagac cagcctggcc aacatggtga aacccacctc tgctgaagat
                                                                      120
acaaaaatta gcctggcttg gtggcgggca cccgtagtcc cagctacttg ggaggctgag
                                                                      180
gcatgagaat tgctcgagcc tgagaggcag aggttgcagt gagccaagat tgcgccactg
                                                                      240
cactccagcc tgggtgacag agcaagactc catttcaaaa aaaaaaggaa aaagagacta
                                                                      300
agagactaat tatttggaat ctggaagttt aaaatccaac ttttctcttt ctcctttggg
                                                                      360
acattagaac agtagttcta taacttcatt gtaagaatca cctggataat tcattaaaga
                                                                      420
tgcagattca gggccacgtg ttcaattctg atacagtagg tcctgtaata aggcctagga
                                                                      480
atggccattt ttaaacagta cactaggtgg ttttgataca gatccaagga ctctaattta
                                                                      540
gaggaacact aggttagagg tttctcagac ctgcaaacac ctaagcacct gggctaaaca
                                                                      600
aagctacaac gaagatctgt atgaagatat atagttctgc agaatttaaa aagagcacaa
                                                                      660
tttaagtett eggeeeteag aagttaaatt catatteeat etaageeaac tttgatttte
                                                                      720
attaagttag aatgaactcc tagtattcca gtattacaca gaacgaagta ctactactaa
                                                                      780
cacatagaag tcattactgt gatataaaaa gcaaaataga tccttaatta aaaattagtc
                                                                      840
actcatattc agtgttgaat aagaagttaa agtttctagc ataactatct tgagtgcatt
                                                                      900
aaaaaatgctt ttagagcaat aagataagct tctagctgac tgcctagaaa aacagaagat
                                                                      960
acaaattcag tgtcagaaat gaaagggaat acactacaga cactatagtt attaaaaggc
                                                                     1020
taactagaaa acaccatgac caactcaagg attgtatatt taacaactta gatgaaacag
                                                                     1080
attccctata ggatacaaac tagaaagctc actgtagaaa cagataacct aaacagaacc
                                                                     1140
atatttatta aggaaattga gtttgtgggt aagttaaaaa ccttccagta aagaaaacta
                                                                     1200
caggcccaga taacttccga gatgaatttt accaaacact taagggagaa agaatatcaa
                                                                     1260
ttctaaacaa tctcttccag gaaacagaag aggaggaaat acttcccaac tcattttatt
                                                                     1320
tgaccagtat tacccagaca aagatactat aagaaaaaaa actttaaaac aatgtcttca
                                                                     1380
tgtgctaaca tctgtagtta aattagccat tctttttaca tgaaataatg ggaattggta
                                                                     1440
tatttcttcc atttcatttt tctatttctt tgctaatata ccacctgtaa caaattcaat
                                                                     1500
ctagatgcta tctgtccact tgcctacatt tccattctat tcaagccatt tttgctcttc
                                                                     1560
aagtaccttg atcactttgg aatcatagca ttgcaagcta tttcaaaaaa agttgcgtgg
                                                                     1620
ttggattgtg ctagctactt ttaaatttat aaaaaatgcc ccatatattt tcttgcttgt
                                                                     1680
ctgggaaata tagttgctat ctaactagaa aaataagagg gcattattaa agtaactctt
                                                                     1740
taagcatcgt actaaatgtt tgacttccat taaccatatt tcttgtagta gctgtagcta
                                                                     1800
ttatgatact gtgtaaaaca gaacaggttc tatatatgca aatgacattt tcatttaatg
                                                                     1860
taccaaattg tgtatctaac ttttataata taggttaaac agatcctttc taagatggca
                                                                     1920
```

```
ttatttaatc tttacttaaa actatgaaaa atatgtgtaa gttattgttt ataaacagaa
                                                                     1980
                                                                     2040
gagactataa ttaaaatata gagcagattc caagtgacca tcattttact ttttagattt
aaaacagaat gaaacagaag atttagtcat aagaagatgc ttgaaaaaaca atccaagtat
                                                                     2100
ccaatgcagt ggctataaaa tattatttca tcatttaatc ttaatcattt tgaaacaaag
                                                                     2160
acagacttca attttacact gcttgcactt tattttgtac agacatttca ttaattatta
                                                                     2220
ctcaattttg aggtgcaaac cttctgaata tagctttcat tttggaccaa acaatttgtt
                                                                     2280
                                                                     2340
atggcaataa ataatgatgc attgaaaaac caatttttgt atttgattta atcgcactct
tacatttaag aaatttatat atacattett gaattteaae ttaceaaaat agaatagett
                                                                     2400
ttatttaaca gcctaagctt ttgttttcct gacaatact gaaacttttt ggttacatta
                                                                     2460
                                                                     2520
atgctgcaaa gttgtttatc acctcaactt tctcactgct ttgctcataa ctaagtgtga
                                                                     2580
ttacatggag agagaaagtt ttgtaacagt aacacatgat ttagagttta aaatcatatc
agaagatggg aattatttaa atatacctta taaaaataag tggcttaatc aatgagaaaa
                                                                     2640
                                                                     2700
aaacccaggg gtttttggct tataattaga aaataagtat tattcttagt taatagttaa
ttaaaaaaaa tcaacaacct aaaaagtaaa accaattctg atgtgttcag tagctgaaag
                                                                     2760
atatgtatgt ttgtaggtat aatatacaaa tacagacaca aaccattaca gtaattttga
                                                                     2820
                                                                     2880
aaacaactag aaagcttata ctgtgttgac aaatatcagg ttataagagg actaccccct
                                                                     2940
ttgttttaag caaacttttt ctgctgaccg aatagctagg aaaaaactgg agttaactga
                                                                     3000
aatatttcta accaaaatat tacaaagttc taagaaacaa ctctatcttc tagattgagg
tcagccaact atacccctgg cggggccaaa tctggccccg gctggcctct ttttttttga
                                                                     3060
ggacaggggt cttcactctg gtcggctcgg gntagg
                                                                     3096
```

```
<210> 6276
<211> 2930
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2840)...(613)
<223> similar to gi575654 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6276 tttttttttt ttgggagaca cttcttttat ttaggaagga ggtccttccc ctactggcgc 60 egggeteeet gecaagaggg teggggtgae eageegggat ceagaageae tgeteeteae 120 acacagtggg agtggaggat ggcttccccg cagcctcttt agaaagccca ggagttctct 180 ttatttcaga gaagggcatt tctatacaag acatcattcc attacagtcg tcacttccaa 240 300 ctacaggete agggagacga etettgatat teataggtat atatttaett taateatatt ttagaaatca gctcttccac actaagattt acaataaaaa taaaataatt tqttctqtaa 360 actatagtag aaagtttcaa atgtcttaaa aactatcttc catacaatgg aaaaaggctt 420 ttgtgttctt ttgggcaaag aagacccaaa tacgctgaga gaagacgcat gggcgtgttg 480 ctggagtgat gctggaagca cttctttgct acagacggtt gctaagagaa cagagtcact 540 ttctcccctt cagcctggaa gtccaactct tctcttgctt aagaatctaa cctcgggatc 600 ttccaagatg cttaaggctg ctctgctgtt gcctggtcct tggcagcagc aacaagctct 660 gegagagetg agaagetttt tatgteaett gettgtagte eeaaettttg tatetgetet 720 cccaagtact caacatctag ggccaactgc agcctgattt tgtcgtcgtc gctcatgcca 780 ccactgggac cgacggggtt ggcgggagtg gtttttctgg cttgtttcag ccttttcagg 840 ctctcttcca tcttcttcac agagtttaat acatctgaca cggtttcata gtacttatga 900 gtgctttcac tgagagtgcc ttctagccac tgctgaatta ttgcttgttt gagcttatcc 960 ttgtgtccgc tctgaagctg gaataagggc ttcagagcac tgtccacata ggaggaagct 1020

```
gtggttggga cctccttatt ggttcttcgg taaagcctgg gaacctccag ggcgcttttt
                                                                     1080
aggaaaccga agcaagagtc acttaaatcc tggatgatct tgctactcaa ggagggcaca
                                                                     1140
caggctgaaa aagagctctg ggagtcctcc agggctgctg agatagaaga aaaattctta
                                                                     1200
aagccaatca tttcaagttt tggcttgatt atttccaaga gttctggaag ctgctcctga
                                                                     1260
agettgteca ggtetgeaac cacatacaeg agetgagtge gggaaatgga aaccacagge
                                                                     1320
tttgtttccg aaggaccact tccttggtct tcagtgtttc cttgggtgat ggaaggttct
                                                                     1380
ttgctaccag ttaccaaagg tttcttgatc tccttgggac tttcattaga aatgggcctg
                                                                     1440
                                                                     1500
agtgaaagct ccattggaca aacacagagt atcgtgccca aaatctgcca gagtgaagtc
tecacaggeg atgeaceagt aatggeaaga acateteate tgaceaacae etectaagge
                                                                     1560
tgctccaagt tctatgagaa gccaaaaggc aatacggact ttcagctggg gcatcttcca
                                                                     1620
                                                                     1680
ggacatetgt aagtgetget tetaaggate eegetattte tetaaatett atttgaaaat
aaacaggcaa gttccacttc ttattgaagc tgtgataggc aggatgggct cttaatctct
                                                                     1740
ttacactage etgtgateca cactgeegtt ecaatettet gacaaaatec atacttatgg
                                                                     1800
tatatttctc atgaaatgca tcgggattcc caggattaaa aagcgagggt aacttttctt
                                                                     1860
ctaatccttg tactatttgt ggccaaacag aattcaccaa aaagtcatat ccaggaacag
                                                                     1920
tattgccttt ttcactggag atggcacctc ctgtgacttc tcgaagaagg cggcaatggt
                                                                     1980
                                                                     2040
gaggaacaaa ctccaggagt ttattataca tgacctgaag gccattggga tgagattcaa
caaactgctc tataatcacc tcgtctatgt atggtttcac tagtacttgg ccaactaagg
                                                                     2100
ceteegegte eegtgtettg teaategtgg egtaagteeg eaageagtge egtattatat
                                                                     2160
                                                                     2220
cgacgtcaga cgtctgaagg ccttctaata ggagaccttc cagtgactgc tgtaacatgg
ctgtaatgcc agctatacgc ggtcttactt tgtccaaaag aggcatgcct tttgctttga
                                                                     2280
caagcatgaa actgtaactg attaaattct gtggcaattc tctccaaaat ttgtccagtc
                                                                     2340
aaaagggggc tgcttgcttc tagtgcagag gtttctttag aactttgaga gtttaagatt
                                                                     2400
ttttcaattt tctcaactga ccgaataact tgtataagcc tcaatacaca catcttttt
                                                                     2460
ttcctaatgt cctcttgttt agacattcgt tcatcaactg cccgaattcc ttcactgaca
                                                                     2520
gacgatctaa ggctcagaac ctcttctcgt aattgtccca aaggcacaga aagctggttg
                                                                     2580
agggetttgt ccatgecaac caagtttgtt gaaagattga caaaaatetg cataateett
                                                                     2640
gttgatgagt tcgaccatgg ctgttttaag aagtttatag tagagctcca ggtcatctct
                                                                     2700
cagttettee agetggaece getteetaca gteagaeaca aaatgatega categaaate
                                                                     2760
tteetteatg aactegteet tgtegaagea gagegtgtee ggeeeettgg geaggtteat
                                                                     2820
cctacttttc tccatcccgc cggccaccgc ctctcagtgc caagatccca gcgagaaaac
                                                                     2880
gcaggaggat gcgcagaccg actcggcggc cgcggccacc gccagtttcc
                                                                     2930
```

```
<210> 6277
<211> 696
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (669)...(170)
<223> similar to gi4929725 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
taatgtgcac gtccatcttg aaacgctgag gaaggagcg cagaagcttg accttgatgg 360 acagaccaat aagggtggcc atgctgcagt gcggaatggt tggtgtgaaa gccacagcca 420 ctgtactctc ggggtcgcta acctgaaccc gcacctgctc tactacgttc aactcctcta 480 gcgtcagtgg atgctccggg tcattgatgg agcgaatcag atcgaagatc tcgcgtgcgt 540 cgatgctgtc gggaacctgc tcgtcctcct cgcctgccgt cacaggccgc tccccagagc 600 gctggtagat gagggggttg gcattctcca ggaggccgcc gccgaccccg ccgccgcta 660 ccatcgcgga accaccaccg ctgatcctag caggcg
```

<400> 6278 ttttttttt ttcttgtggc cattcccagg tttaattaca aaccgatccg aacatcccat 60 ctgggtcgac agctgggagg gcaggattgg ggggaagctg ctgggcgcag cccaggccag 120 gcaaccacgt cetteceetg etcecaggtg gagtagggge etcacgactg cetegatate 180 cactgtcttg gagcagcctg gctaccccga gatcccaggt gacctcaagg ctgcctgcac 240 ttcagegeca geatgtatee tggeetgaga acceeaaage acettaageg teeceectea 300 aagacaactg tgcacccagt cctcaggtgg gaagaggaag cccagccagg cccggaatcc 360 gestestese cagggtestg ggagetetga stetesgggg egttagaseg aassagssag 420 gcgagagggg gacccacggg ccagggctcc gaggcagcgg ctgcttctgg atatattttc 480 tttaaaggcg aaatggttcc gtctttggta tgaacaccct cactccaggc aaaggagggg 540 gtgggcaggg gccccggcag gaggaggctc tgcccagccc ggggccagct ggaggaagga 600 ccatgccaga ggctcatgcg gaggaaggag aggcagcggt ggttcggcct gaccaggatc 660 caggaggagg gctgagagcc ccaaggccat gacaggcagg agccggggct gagaacaggc 720 aggagecagg getgagaacg gteacetgge teagggetee egtgagaeca egecaegeag 780 gtgcagctca ctctcggcgg ccacgatggg ctgcccgttc tgcaggtggt ggtcgatcag 840 gtggctgatg ctctcaaaca gcacgtcctt cgtccgtacc acgccctcgg ggtccacgag 900 cagcaggtgc ttgggctgcc cggcgtgcat gccggtgagg acatactgcc cggggttggt 960 gacgetgtet egeacaagga agteeeegte agetegaage ateetetetg eegeeeggeg 1020 gctcatccgg ccgtggtacc agggctcctg acgcagctgt tcctccgtgg gggccacagg 1080 ggcccggcgg gtagggggc tgggccactg gtcctccaag ggaagagggg ctgctgtcac 1140 gcctgccgcc actgagcact catgcaactt cagggcatcc tcaaagggtc gcatgtcaaa 1200 cagateettt ttggggetgt ceteeggete gggggegtee agaeeetggg tgttgacata 1260 caggtgctcc tcgtggtccg gggggccccg ggcgtccgcc tgcacgtagc cgtcccccgg 1320 tggagetgta ceggtggaee ceaegteeea tggeaggetg caggeatete ttagagaagg 1380 agatgggccc tggtcgaggg ccgtgagggc gcagggctgt gtcagggcca gcctggagtc 1440 cactageceg eccageggeg geteetteee egggatgetg ttgtagtaat tgtgeteeaa 1500 agagteetee tegteeceee aggeegaete eteeggeeet geeageettt etgggggeag 1560 cgccaccttg ggcgggctgt gcaggtactg cttgaagcgc agctcgaaag cttggcccca 1620 eggtgetgat gatgetetgt gecaggeeet cacagcacte caggatgtgg caggetetet 1680 ggttgatggg gtccttggcg acgtaggcca cgtaatccgt catgtccgtg tctccgcctg 1740 acgcgaagga gatggacggc atgtggtggt tggcgatgac ctggcgcgtg gcaggcacgg 1800

```
agaggctgag gccatcagtg gagatgtgga tggagatgct catgccggca aagcgaaggt
                                                                    1860
tgctcttgcc caggacggac gccagggcct tgttgggggc ctttttcttc caggatcccc
                                                                    1920
ggacgccagg cacggcctca tggagccggt tgatggcttc cctggtcacc tgcgtgcgcg
                                                                    1980
tgttaaagtc cagggagcgc atagagcgga gaacctcgat gcagcccatg taccgcacga
                                                                    2040
cgtaggagac cccgggcccc aggaccctgg cgtcggggtg tagccagccg tgcgcgggtt
                                                                    2100
tgtggatgaa gctgcccttc cggatccact cggcggcggc ggcggcgtcc ccggaccccg
                                                                    2160
cegeceeeg ceegeceege gaceeeegeg acceegegee eegacagegg etgagegegg
                                                                    2220
geaggggaea gggegeggeg cagegggget egeaggegee caggaeggeg geegeeageg
                                                                    2280
cegggaegec cecegggece geeggategg gttgggggec egegeeecec gagecegagg
                                                                    2340
cgcccaccac cttctgcgcg ttgctgcccc gaat
                                                                    2374
```

```
<210> 6279
<211> 1920
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1857)...(715)
<223> similar to gi2997692 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6279 gtttatctta ctacatggtt atttttgtag actcttggta tcttttatcc taagacaccc 60 acttettgat tteatgeage gecacatgaa etatatatta tacataaaga agaacaaaaa 120 agggaatgca ggttataacc attggccctt taattgaaga gtctaaaaac tagaggtctg 180 taacagaata ctaatcctgc agaacaaggg acagaaaagt caggcgaggc aagcttgtct 240 tcgtaacctg ggctctcaat tggggtgctc tcttacattt caattgaata tctgtttta 300 aacctccctt caacagtcag ggtgtctgtc tattttgtgg cttccaaaat tctaactgca 360 aaataaatga ccatcttatc atgttttccc atggctatca ggaggatata gcaattttat 420 agattactac atggtcaaga atctacgcat cggatgtatt cttttcttct tctttacttg 480 atgcattcaa aagcaacccc tggatttttt tcaatgtaaa aaagaaaaat agatacccat 540 gccaaaattc atgggtgtaa acagccaaca gagccaaact tacaaagaaa atgaaagact 600 tgtttctgga cagtggtttt attggtaaag atataagaca tattggctct attaaaaact 660 caggtaataa agcactaagc ttgatttttg tattgctaca gtctctttct tctaagggga 720 agaaaatctc cccaagaata ggatgctacc tgaggaatta tgccgaataa agaaaaggaa 780 tggatggtcg gcagtgaaat tttcttcggg catcaacatg cagaaagttg cgatgcctgc 840 tgtggcagct gccgcctctg ttccctcttc attcacttcc acaaatgact tgtggacaat 900 ttttgatata aaaatatctc tggctcctga catgccagac agatcagcct tgctactgtt 960 aaagagatcc tgcacaccta ggcgggcgag gtcggagttg agagtgtaac tctcttccag 1020 tttgaacctg ggcaagctga cattaacttc aatgaaatcg agattctcag gtttagtcca 1080 ctcatgcaac ttttccaaag tcaactgttc ctcaatcttc ttcaggcccg tggactcgtc 1140 ctcaatgtca teeggeagea ggatgaecat getgagetee tegeettggt aaggeagtte 1200 cagcacaccg gaacttaagg tcctcgatgt agccatatgc aaattttttc ttctgataca 1260 tcattttcac agtttttctg tctttcttat tcaatctgaa tggtgcattc gtcgtggctt 1320 ctttcatgaa tttatccttc cagtttccct tgaaatagat ggcatttact agcacaagtt 1380 tggtcatgtt atcaaccatg cccgaagcca acagttccgg aatttttcct tctgtctgtc 1440 ctttgaccca ctggtttatg gtcttccttg catcttcaga ggcatgctga aaatccacac 1500 tggccaggtc agcaccatat gttttctgag tcgaaaccaa gaactcagga aggaaattgt 1560 aagttttctc tccatataat ctattagcaa gtttcagaat ataagacgct ccacgtttgt 1620

```
tgatatcage atteagacte tggaatettg aatgaacete tteaacegtg ttgaaatgga 1680 aagtettgga cagetgtget geegtgttae etetggteee cagaaaaace atggeeatag 1740 cagatgaaat getgaaggga gagatgaaga tgttteeage eggattgtte teaeteaacg 1800 ceaggaacag geegaggeg aagegggtgt ttgetgaget eagetgetee atggtgaaaa 1860 cegacaggee geegaggeae geteeggget eegagetggg tgegaggtea ggaaggagge 1920
```

```
<210> 6280
<211> 4179
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (176)...(2834)
<223> similar to gi3095032 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6280 gcggccgcag cgtggagccg ggtgattgtg accgccgggg gagccgggag ccggccgcgg 60 egecetetet cegtgtggee eeetgagegg eeeeeeteee etgeeeggga gggaggeggg 120 gggcacctgt gggcagccag tgaaccccgt cttcgatttg tcccgccgga acccgcagga 180 ggacttcgag ctgattcagc gcatcggcag cggcacctac ggcgacgtct acaaggcacg 240 gaatgttaac actggtgaat tagcagcaat taaagtaata aaattggaac caggagaaga 300 ctttgcagtt gtgcagcaag aaattatcat gatgaaagac ttgtaaacac ccagagtatt 360 gttgcttatt tttggaagct atcttcaggc gagataagct ttggattttg catggagttt 420 ttgtggaagt gggtccttta caggatattt atcacgtaac tggacctctg tcagaactgc 480 aaattgcata tgttagcaga gaaacactgc agggattata ttatcttcac agtaaaggaa 540 600 aaatgcacag agatataaag ggagctaaca ttctattaac ggataatggt catgtgaaat tggctgattt tggagtatct gcacagataa cagctacaat tgccaaacgg aagtctttca 660 ttggcacacc atattggatg gctccagaag ttgcagctgt tgagaggaag gggggttaca 720 atcaactetg tgatetetgg geagtgggaa teactgeeat agaacttgea gagetteage 780 ctcctatgtt tgacttacac ccaatgagag cattatttct aatgacaaaa agcaattttc 840 agcctcctaa actaaaggat aaaatgaaat ggtcaaatag ttttcatcac tttgtgaaaa 900 tggcacttac caaaaatccg aaaaaaagac ctactgctga aaaattatta cagcatcctt 960 ttgtaacaca acatttgaca cggtctttgg caatcgagct gttggataaa gtaaataatc 1020 cagatcattc cacttaccat gatttcgatg atgatgatcc tgagcctctt gttgctgtac 1080 cacatagaat tcactcaaca agtagaaacg tgagagaaga aaaaacacgc tcagagataa 1140 cctttggcca agtgaaattt gatccaccct taagaaagga gacagaacca catcatgaac 1200 ttcccgacag tgatggtttt ttggacagtt cagaagaaat atactacact gcaagatcta 1260 atctggatct gcaactggaa tatggacaag gacaccaagg gtggttactt tttaggtgca 1320 aacaagagtc ttctcaagtc tgttgaagaa gaattgcatc agcgaggaca cgtcgcacat 1380 ttagaagatg atgaaggaga tgatgatgaa tctaaacact caactctgaa agcaaaaatt 1440 ccacctcctt tgccaccaaa gcctaagtct atcttcatac cacaggaaat gcattctact 1500 gaggatgaaa atcaaggaac aatcaagaga tgtcccatgt cagggagccc gagcaaagcc 1560 atcccaagtt ccacctagac caccacctcc cagattaccc ccacacaaac ctgttgcctt 1620 aggaaatgga atgagctcct tccagttaaa tggtgaacga gatggctcat tatgtcaaca 1680 1740 tattagtaat ggtcttcctc caacacctaa agtgcatatg ggtgcatgtt tttcaaaagt 1800 ttttaatggg tgtcccttga aaattcactg tgcatcatca tggataaacc cagatactag 1860 agatcagtac ttgatatttg gtgccgaaga agggatttat accctcaatc ttaatgaact 1920

```
tcatgaaaca tcaatggaac agctattccc tcgaaggtgt acatggttgt atgtaatgaa
                                                                    1980
caattgcttq ctatcaatat ctqqtaaaqc ttctcaqctt tattcccata atttaccagg
                                                                    2040
gctttttgat tatgcaagac aaatgcaaaa gttacctgtt gctattccag cacacaaact
                                                                    2100
ccctgacaga atactgccaa ggaaattttc tgtatcagca aaaatccctg aaaccaaatg
                                                                    2160
gtgccagaag tgttgtgttg taagaaatcc ttacacgggc cataaatacc tatgtggagc
                                                                    2220
acttcagact agcattgttc tattagaatg ggttgaacca atgcagaaat ttatgttaat
                                                                    2280
taagcacata gattttccta taccatgtcc acttaaaatg tttgaaatgc tqqtagttcc
                                                                    2340
tgaacaggag taccetttag tttgtgttgg tgtcagtaga ggtagagact tcaaccaagt
                                                                    2400
ggttcgattt gagacggtca atccaaattc tacctcttca tggtttacag aatcagatac
                                                                    2460
cccacagaca aatgttactc atgtaaccca actggagaga gataccatcc ttgtatgctt
                                                                    2520
ggactgttgt ataaaaatag taaatctcca aggaagatta aaatctagca ggaaattgtc
                                                                    2580
atcagaactc acctttgatt tccggattga atcaatagtg tgcctacaag acagtgtgct
                                                                    2640
agetttetgg aaacatggaa tgcaaggtag aagttttaga tetaatgagg taacacaaga
                                                                    2700
aatttcagat agcacaagaa ttttcaggct gcttggatct gacagggtcg tggttttgga
                                                                    2760
aagtaggcca actgataacc ccacagcaaa tagcaatttg tacatcctgg cggqtcatqa
                                                                    2820
aaacagttac tgagaattgt tgtgctttga cagttaactc tagaaagaaa qaacactacc
                                                                    2880
actgcaacat taatggatgc ttgaagctgt acaaaagctg cagtaacctq tcttcaqtta
                                                                    2940
ctttgtaatt tattgtggca tgagataaga tggggaaaat tttgttttaa gtggtatgga
                                                                    3000
tatatttagc atattgaacc acacaagtgc ttaattcatt qttatqtaat ctttqtacat
                                                                    3060
ataggcagta ttttttctgt gaaacttcat attgctgaag acatacacta agaatttatq
                                                                    3120
tagataatgt acttttatga gatgtacaag taagtgtctt atctgtacaq atqtaaatqt
                                                                    3180
tgatgaaaat gcaattgggg ttaatattt aagaattctt tagtatattc ttgggtgtgg
                                                                    3240
ctatattaca aaatgggatg ctggcaatga aacaatacat ttaacactat tgtattttta
                                                                    3300
ttatatgtaa tttagtaata tgaatataaa tcttgtaact tttaaaattg taatggaggc
                                                                    3360
tgtaatcatt ttataatctt tttaatttta atgcaagtac actggtgttt atatttqcac
                                                                    3420
agagtattga tatgtgatgt attaagtcac aaaagtaagc tgtgacattg tctataagca
                                                                    3480
tttggctcca caaatgtatt tggattgttt tctatgtgaa gcaaaccaat tataattaac
                                                                    3540
cacatgttgt agtaactggt ctttttatat ttaagcagaa tcctgtaaga ttgcttgtct
                                                                    3600
ttgcttaaaa acaatacctt tgaacatttt tgaatcacag aatagcggta ccatgataga
                                                                    3660
atactgcaat tgtggtcaga attacagtat gcacaaagaa ttaattagca ttattaaaga
                                                                    3720
gtcctcacta aacatttcat atgatcacac tqaaqaactq taacattcca taqaqtqaaq
                                                                    3780
tggttcaaat ttctcttgga atttttactt ttgttggcct tattttatga tccttttcat
                                                                    3840
atttcttttg acttagagta ttaatacatg gccaaaataa tttagttact acctcataca
                                                                    3900
aacaatataa tggttactac acatcacagg aacttagttt tggtttaagt catttttgat
                                                                    3960
tgcttttttc caatggaata tgtatatacc aggttttagc aaaatgcaca cttttggctc
                                                                    4020
tttttggtat atgttcttta tattttaatg tgagtatata cactaagaac aaactaaatt
                                                                    4080
gtgatttatg atcttcattt attttaatgg taatggtttt aaaatatgtt cctgattgta
                                                                    4140
catattgtaa aataaacatg ttttttaaca aaaaaaaaa
                                                                    4179
```

```
<210> 6281
<211> 2441
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (64)...(2238)
<223> similar to gi5578958 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6281
                                                                       60
tttcgtcgct gagctgaagg ctgtgcggag cggcgcggca cagagcctgt tgttgagctc
agtatgtcgt gggaatccgg ggccgggcca ggtctaggtt cccaggggat ggatctcgtg
                                                                      120
                                                                      180
tggagtgcgt ggtacggaaa gtgcgttaaa gggaaagggt cgttgccact ctcggcccac
                                                                      240
ggcatcgtgg tcgcctggct cagcagggcc gagtgggacc aggtgacggt ttatctgttc
                                                                      300
tgtgacgacc ataagttgca gcggtacgcg cttaaccgca tcacggtgtg gaggagcagg
                                                                      360
teaggeaacg aactecetet ggeagtgget tetactgetg acetgatacg etgtaagete
                                                                      420
ttggatgtaa ctggtggctt gggcactgat gaacttagac tgctctatgg catggcattg
                                                                      480
gtcaggtttg tgaatcttat ctcagagagg aagacaaagt ttgccaaggt cccctcaag
                                                                      540
tgtctggctc aagaggtaaa tattccggat tggattgttg accttcgcca tgagttgacc
                                                                      600
cacaagaaaa tgccccatat aaatgactgc cgcagaggct gctactttgt cctggattgg
                                                                      660
ctccagaaga cctattggtg ccgccaactg gagaacagcc tgagagagac ctgggagttg
                                                                      720
gaggagttca gggaagggat agaggaagag gatcaagagg aagataagaa cattgttgtt
                                                                      780
gatgacatca cagaacagaa accagagcct caggatgatg ggaaaagtac ggagtcagat
                                                                      840
gtaaaggccg atggagacag caaaggcagc gaagaggtgg attctcattg caaaaaggcc
ctgagtcata aagagctata tgaaagagcc cgagaactgc tggtatcata cgaagaggag
                                                                      900
cagtttacgg tgctggagaa atttaggtat ttacctaagg ccattaaggc gtggaataac
                                                                      960
ccgtccccac gtgtagaatg tgtcctggca gagctcaagg gcgttacatg cgagaacagg
                                                                     1020
gaggetgtge tggatgettt tetggatgat ggetteettg teeceacatt tgaacagttg
                                                                     1080
gcagctttgc agatagaata tgaagaaaac gtggacttga atgacgtcct ggtgccaaag
                                                                     1140
cegttetete agttetggea geceetgete aggggeetge acteecagaa etteaegeag
                                                                     1200
                                                                     1260
gccctattgg agaggatgct ctctgaactg ccagccttgg ggatcagcgg gatccggcct
                                                                     1320
acgtacatcc tcagatggac cgttgaactg atcgtggcca acaccaagac tggacggaat
gctcgccgat tttctgcagg ccagtgggaa gcaagaaggg gctggaggct gttcaactgc
                                                                     1380
teegeeteee ttgactggee eeggatggtt gagteetget tgggeteace ttgetgggee
                                                                     1440
agececeaac teetteggat catettteaa agecatgggg cagggettge aagacgaggg
                                                                     1500
agcaggagaa gttgttgcgc atctgttcca tttataccca gagtggagaa aacagcctgg
                                                                     1560
tgcaggaggg ctctgaggcc tcccccattg ggaagtctcc atatacacta gacagcctgt
                                                                     1620
attggagegt caagecagee agetecaget tegggtetga ageaaaggee cageaacagg
                                                                     1680
aggagcaggg cagtgttaat gatgtcaagg aagaggagaa ggaggagaaa gaggtcttgc
                                                                     1740
                                                                     1800
cagaccaggt agaggaggag gaagaaaatg atgaccaaga ggaggaagag gaggatgaag
atgatgaaga tgatgaagag gaagacagaa tggaggtggg gcctttctct acagggcaag
                                                                     1860
agtoccccac tgccgagaat gctaggcttc tggcccagaa aagaggagct ttgcagggct
                                                                     1920
ctgcatggca ggttagctca gaagacgtgc gatgggacac atttccccct aggccgaatg
                                                                     1980
                                                                     2040
cccaggtcaa gaccgaggac cccagcagag ctcatgctgg agaattatga cacccatgta
atcttttgga ccaagcctgt gcttagagca gcggctggaa ccctcaacat gcaaagactg
                                                                     2100
acaccttggg cctgaagctg tggtgtcggc agttggcaac tgcagcaaca gcagcagcag
                                                                     2160
caactttcga ggggcctttc tcttggaagc caggggaagc ttgcattggg ctccaaaact
                                                                     2220
ggcctgcagc tcttctgatt ggccatccct ggtgcaagtg ttcatccagc cgtgccaggg
                                                                     2280
catctattta tcccctagta caactgatgc tccctgagac aacctgggag acagcctgga
                                                                     2340
tcagccacat caactcagtt gtccaccaca ggggaatttt gaatgtcttt tgtttttgtt
                                                                     2400
ttgttttgaa aaataataaa caggcaactg taaaaaaaaa a
                                                                     2441
```

```
<210> 6282

<211> 5470

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(5471)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (27)...(4397)
<223> similar to gi2230888 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6282 60 tttcgtgggc tgtaggcgcc aaggccatgt ccgactcgtg ggtcccgaac tccgcctcgg gccaggaccc agggggccgc cggagggcct gggccgagct gctggcggga agggtcaaga 120 180 gggaaaaata taatcctgaa agggcacaga aattaaagga atcagctgtg cgcctcctgc 240 gaagccatca ggacctgaat gcccttttgc ttgaggtaga aggtccactg tgtaaaaaat 300 tgtctctcag caaagtgatt gactgtgaca gttctgaggc ctatgctaat cattctagtt 360 catttatagg ctctgctttg caggatcaag cctcaaggct gggggttccc gtgggtattc 420 teteageegg gatggttgee tetagegtgg gacagatetg caeggeteea geggagaeea 480 gtcaccctgt gctgctgact gtggagcaga gaaagaagct gtcttccctg ttagagtttg 540 ctcagtattt attggcacac agtatgttct cccgtctttc cttctgtcaa gaattatgga aaatacagag ttctttgttg cttgaagcgg tgtggcatct tcacgtacaa ggcattgtga 600 660 gcctgcaaga gctgctggaa agccatcccg acatgcatgc tgtgggatcg tggctcttca 720 ggaatetgtg etgeetttgt gaacagatgg aageateetg ecageatget gaegtegeea gggccatgct ttctgatttt gttcaaatgt ttgttttgag gggatttcag aaaaactcag 780 840 atctgagaag aactgtggag cctgaaaaaa tgccgcaggt cacggttgat gtactgcaga gaatgetgat ttttgeactt gacgetttgg etgetggagt acaggaggag teetecacte 900 acaagatcgt gaggtgctgg ttcggagtgt tcagtggaca cacgcttggc agtgtaattt 960 1020 ccacagatec tetgaagagg ttetteagte ataccetgae teagatacte acteacagee ctgtgctgaa agcatctgat gctgttcaga tgcagagaga gtggagcttt gcgcggacac 1080 accetetget caceteactg tacegeagge tetttgtgat getgagtgea gaggagttgg 1140 ttggccattt gcaagaagtt ctggaaacgc aggaggttca ctggcagaga gtgctctcct 1200 ttgtgtctgc cctggttgtc tgctttccag aagcgcagca gctgcttgaa gactgggtgg 1260 cgcgtttgat ggcccaggca ttcgagagct gccagctgga cagcatggtc actgcgttcc 1320 tggttgtgcg ccaggcagca ctggagggcc cctctgcgtt cctgtcatat gcagactggt 1380 1440 tcaaggcctc ctttgggagc acacgaggct accatggctg cagcaagaag gccctggtct 1500 tectgtttae gttettgtea gaactegtge ettttgagte teeeeggtae etgeaggtge 1560 acatteteca eccaeceetg gtteecagea agtacegete ceteeteaca gaetacatet cattggccaa gacacggctg gccgacctca aggtttctat agaaaacatg ggactctacg 1620 aggatttgtc atcagctggg gacattactg agccccacag ccaagctctt caggatgttg 1680 aaaaggccat catggtgttt gagcatacgg ggaacatccc agtcaccgtc atggaggcca 1740 gcatattcag gaggcettac tacgtgtecc acttectece egecetgete acacetegag 1800 tgctccccaa agtccctgac tcccgtgtgg cgtttataga gtctctgaag agagcagata 1860 aaatcccccc atctctgtac tccacctact gccaggcctg ctctgctgct gaagagaagc 1920 1980 cagaagatgc agccctggga gtgagggcag aacccaactc tgctgaggag cccctgggac ageteacage tgeactggga gagetgagag cetecatgae agaeeecage cagegtgatg 2040 ttatategge acaggtggea gtgatttetg aaagactgag ggetgteetg ggecacaatg 2100 2160 aggatgacag cagcgttgag atatcaaaga ttcagctcag catcaacacg ccgagactgg agccacggga acacatggct gtggacctcc tgctgacgtc tttctgtcag aacctgatgg 2220 etgeeteeag tgtegeteee eeggagagge agggteeetg ggetgeeete ttegtgagga 2280 2340 ccatgtgtgg acgtgtgctc cctgcagtgc tcacccggct ctgccagctg ctccgtcacc agggecegag cetgagtgee ceacatgtge tggggttgge tgecetggee gtgeacetgg 2400 gtgagtccag gtctgcgctc ccagaggtgg atgtgggtcc tcctgcacct ggtgctggcc 2460 ttcctgtccc tgcgctcttt gacagcctcc tgacctgtag gacgagggat tccttgttct 2520 tetgeetgaa attttgtaca geageaattt ettaetetet etgeaagttt tetteeeagt 2580 cacgagatac tttgtgcagc tgcttatctc caggccttat taaaaagttt cagttcctca 2640 tgttcagatt gttctcagag gcccgacagc ctctttctga ggaggacgta gccagccttt 2700 cetggagace ettgcacett cettetgeag actggeagag agetgeeete tetetetgga 2760 cacacagaac cttccgagag gtgttgaaag aggaagatgt tcacttaact taccaagact 2820

```
ggttacacct ggagctggaa attcaacctg aagctgatgc tctttcagat actgaacggc
                                                                   2880
aggacticca ccaqtqqqcg atccatqaqc actiticiccc tgagtcctcg gcttcagggg
                                                                   2940
gctgtgacgg agacctgcag gctgcgtgta ccattcttgt caacgcactg atggatttcc
                                                                    3000
accaaagete aaggagttat gaccacteag aaaattetga tttggtettt ggtggeegea
                                                                    3060
                                                                    3120
caggaaatga ggatattatt tccagattgc aggagatggt agctgacctg gagctgcagc
aagacctcat agtgcctctc ggccacaccc cttcccagga gcacttcctc tttgagattt
                                                                    3180
                                                                    3240
teegeagaeg geteeagget etgaeaageg ggtggagegt ggetgeeage etteagagae
agagggaget getaatgtae aaaeggatee teeteegeet geettegtet gteetetgeg
                                                                   3300
geageagett ceaggeagaa cageeeatea etgeeagatg egageagtte tteeaettgg
                                                                    3360
tcaactctga gatgagaaac ttctgctccc acggaggtgc cctgacacag gacatcactg
                                                                    3420
                                                                    3480
cccacttett caggggeete etgaacgeet gtetgeggag cagagaceee teeetgatgg
tegaetteat aetggeeaag tgeeagaega aatgeeeett aattttgaee tetgetetgg
                                                                    3540
tgtggtggcc gagcctggag cctgtgctgc tctgccggtg gaggagacac tgccagagcc
                                                                    3600
cgctgccccg ggaactgcag aagctacaag aaggccggca gtttgccagc gatttcctct
                                                                   3660
cccctgagge tgcctcccca gcacccaacc cggactgqct ctcaqctqct qcactqcact
                                                                    3720
ttgcgattca acaagtcagg gaagaaaaca tcaggaagca gctaaagaag ctggactgcg
                                                                    3780
agagagagga getattggtt tteettttet tetteteett gatgggeetg etetegteae
                                                                    3840
atctgacctc aaatagcacc acagacctgc caaaggcttt ccacgtttgt gcagcaatcc
                                                                    3900
tegagtgttt agagaagagg aagatateet ggetggeact ettteagttg acagagagtg
                                                                   3960
acctcagget ggggeggete etecteegtg tggeeeegga teageaeaee aggetgetge
                                                                   4020
etttegettt ttacagtett eteteetaet tecatgaaga egeggeeate agggaagagg
                                                                   4080
cetteetgea tgttgetgtg gacatgtaet tgaagetggt ceagetette gtggetgggg
                                                                   4140
atacaagcac agtttcacct ccagctggca ggagcctgga gctcaagggt caggcagggc
                                                                   4200
aaccccgtgg aactgataac aaaagctcgt ctttttctgc tgcagttaat acctcgqtgc
                                                                   4260
ccgaaaaaga gcttctcaca cgtggcagag ctgctggctg atcgtgggga ctgcgaccca
                                                                   4320
gaggtgageg cegeceteca gageagacag caggetgeec etgacgetga cetgteecag
                                                                   4380
gagceteate tettetgacg ggacetgeca etgeacacea geceagetee egtgtaaata
                                                                    4440
atttattaca agcataacat ggagctcttg ttgcactaaa aagtggatta caaatctcct
                                                                   4500
cgactgcttt agtggggaaa ggaatcaatt atttatgaac tgtccggccc cgagtcactc
                                                                   4560
4620
accaageceg cetecageae caagggeggg cageaceete egaceeteee atgegggtge
                                                                   4680
acacgaaggg tgaggctgac acagccactg cggagtccag gctgctagag gtgctcatcc
                                                                   4740
tcactgccgt cctcaggtgg gttcgggctt caccgcctgg ccctctgtgg tcacagaggg
                                                                   4800
geteggtgge ceaggtggtg gtteegeete eaggggeagg geettgteet gggtetgtet
                                                                   4860
cagegggtge accatggaca tgtgtacatt gaggttgtgg geetteteaa accgeeggee
                                                                   4920
acactggtca caggcaaagt ccagctcagt ctcagccttg tgtttggtca tgtggtactt
                                                                   4980
gagggatgcc cgctgcctgc actggaaccc acagacctca cacctggggg acagaggcag
                                                                   5040
ataaaaaggt gcgagggcca cagccctggg gggggtcctg actcacactt actgcaaagg
                                                                   5100
cttggctccc gaatgtcgca tttggtggac gagaaggtgc ttccgctgct tgaaggtttg
                                                                   5160
tccacattcg tcacagatat agttccgcac ctctgagagg ggagagtcca gtgagtccag
                                                                   5220
gcccctgatg ctccaacctc ccggggggac gacgatgaca atgtgaaacc atcacagctg
                                                                   5280
ggaagacatt tetgcacatg gttcaccatg cagtgggccc aagcaagggg cetatgaggg
                                                                   5340
cctcgtttat taagatcttt aaactgcttt atacactgtc acgtggcttc atcagctgtg
                                                                   5400
tgcatttcag gatggttttt aaagaaacct cagaaagcta tttccttaac cacaaaanan
                                                                   5460
aaaaaaaaa
                                                                   5470
```

```
<210> 6283
<211> 1913
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(1914)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (465)...(1794)
<223> similar to gi4580013 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6283 tttcgtccgg aacggcggca cggggttgtt gtgggggtca gtcccccggg gactggaggg 60 agacgeggea egeggeetet gegaeeetat gaaetetgae eecageteee acaetgtege 120 ctatcaccgg cccactctcc gtgccgcgtg tcccttaaaa gctggggcct gggacaggaa 180 cgacagacaa tgcagccaat ggcgtcacgc gcggtgcccc gctacccaat cgaaaqqcqt 240 ggctgaggga aacgcggtgg gaaccgccc cgactccagg cgactccttg qccqqqqqq 300 ggagagegte ceegteaget gagageatee teacteggte agtteetegg gegagttacg 360 gggacgacet gegggageae gegggeagtg geeggaeget gaageeeagg agagegatgg 420 agacgtatgc ggaggttggg aaggaggca agcetteetg tgcateggtg gatetgeagg 480 gagacagete ettacaggtg gagatttetg acgeagtgag tgagegggac aaggtgaaat 540 teactgttca aacaaagage tgcctccctc acttcgccca gaccgagttc tcagtcgtgc 600 ggcagcacga ggagttcatc tggctgcatg atgcctacgt ggagaatgag gagtacgccg 660 gcctcatcat ccccccagcc cctccgaggc cagactttga ggcttcgagg gaaaagctac 720 agaaattggg cgagggggac agctctgtca ctcgggaaga gtttgccaag atgaagcagg 780 agctggaagg nagtacctgg ccatctttaa gaagacagtt gcgatgcacg aagtctttct 840 geagegeetg ggeggeeeae eccaecetge gtegagaeea caacttettt qtqtttttqq 900 gaatatggga caggatctga gtgtccgggg gaaggaacag gaaggaqctc ctcqqaqqqt 960 ttctgaggga tattgttgaa gttccgcgga tgaagccctc atcacgggca tgtcagggct 1020 caaggaggtg gatgacttct ttgagcatga gaggacaaac ctgttggagt atcacacccg 1080 tatccgagat gcctgcctgc ggccgaccng tcatgcggcc cacaagtgta cgcagggccc 1140 aaggggtcct ggatcccct gcccctctcc ccagcggttc aactccttgg gggagagaag 1200 agagcaggge nagcettgtt gtttgtetgt ggccacaage accaaggett gacatgcaga 1260 tgtaggggct ctgatggggg ctgttcccca acaggcctgg cagacgatta tatccctatc 1320 teagetgege tgageagtet gggaacacag gaagteaace agetaaggae gagetteete 1380 aaattggcag agctctttga acggctgagg aagctggagg gccgggtggc ttccgatgag 1440 gacctgaagc tgtcagacat gctgaggtac tacatgcgtg actcacaggc agccaaggac 1500 ctgctgtacc ggcggctgcg ggcactggcc gactacgaga atgccaacaa qgcqctqqac 1560 aaggegegea ceaggaaceg ggaggtgegg ceegeegaga gecaceaqea getqtqetqe 1620 caacgetteg agegeetete egacteegee aageaagage teatggaett caagteeege 1680 cgggtctcct cttttcgaaa gaatctcatt gagctggcag agctggagct caaacacgcc 1740 aaggccagca ccctgattct ccggaacacc cttgttgccc taaaggggga gccttagagt 1800 agccagaget cagecaggee ctaatetqqq atetecaqtq accaqqqtat eccaqaeeee 1860 teteteegge aagatgtete etteeetage agtgecacta gecacactgt att 1913

```
<210> 6284
<211> 750
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (47)...(681)
     <223> similar to gi206543 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6284
getgegette cetggteagg caeggeacgt etggetggee gecaggatge aggeeegea
                                                                       60
caaggagcac ctgtacaagt tgctggtgat tggcgacctg ggcgtgggga agaccagtat
                                                                      120
catcaagege taegtgeace agaacttete etegeactae egggeeacaa teggegtgga
                                                                      180
cttcgcgctc aaggtgctcc actgggaccc ggagactgtg gtgcgcctgc agctctggga
                                                                      240
tatcgcaggt caagaaagat ttggaaacat gacgagggtc tattaccgag aagctatggg
                                                                      300
tgcatttatt gtcttcgatg tcaccaggcc agccacattt gaagcagtgg caaagtggaa
                                                                      360
aaatgatttg gactccaagt taagtctccc taatggcaaa ccggtttcag tggttttgtt
                                                                      420
ggccaacaaa tgtgaccagg ggaaggatgt gctcatgaac aatggcctca agatggacca
                                                                      480
gttctgcaag gagcacggtt tcgtaggatg gtttgaaaca tcagcaaagg aaaatataaa
                                                                      540
cattgatgaa gcctccagat gcctggtgaa acacatactt gcaaatgagt gtgacctaat
                                                                      600
ggagtctatt gagccggacg tcgtgaagcc ccatctcaca tcaaccaagg ttgccagctg
                                                                      660
ctctgggctg tgccaaaatc ctagtaggca cctttgctgg tgtctggtag gaatqacctc
                                                                      720
attgttccac aaattgtgcc tccaatttta
                                                                      750
     <210> 6285
     <211> 1583
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (51)...(1038)
     <223> similar to gi642942 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6285
acgatttcgt gaaaaacacc ctgtttcctc tccggccccc accgcggatc atgtaccagg
                                                                       60
attatecegg gaactttgac acctegtece ggggcageag eggeteteet gegeacgeeg
                                                                      120
agtectacte cageggegge ggeggeeage agaaatteeg ggtagatatg cetggeteag
                                                                      180
gcagtgcatt catccccacc atcaacgcca tcacgaccag ccaggacctg cagtggatgg
                                                                      240
tgcagcccac agtgatcacc tccatgtcca acccataccc tcgctcgcac ccctacagcc
                                                                      300
ccctgccggg cctggcctct gtccctggac acatggccct cccaagacct ggcgtgatca
                                                                      360
agaccattgg caccaccgtg ggccgcagga ggagagatga gcagctgtct cctgaagagg
                                                                      420
aggagaagcg tcgcatccgg cgggagagga acaagcttgg ctgcagccaa gtgccggaac
                                                                      480
cgacgccggg agctgacaga gaagctgcag gcggagagca catgaggtgc aggatgagga
                                                                      540
gtcaggccct gcagaacgac attgctgagc tgcaagaagg agaaggagaa qttqqaqttc
                                                                      600
```

660

720

780

840

900

960

atgttggtgg ctcacggccc aagtgtgcaa agattagccc cgaggaggcg ccgatcgccc

ccagccgcct tgctgcagcc catgcgcagt gggggtggct cggtgggcgc tgtagtggtg

aaacaggage eeetggaaga ggacageeee tegteetegt eggegggget ggacaaggee

cagcgctctg tcatcaagcc catcagcatt gctgggggct tctacggtga ggagccctg

cacaccccca tegtggtgac etecacacet getgteacte egggeacete gaacetegte

ttcacctatc ctagcgtcct ggagcaggag tcacccgcat ctccctccga atcctgctcc

```
aaggeteace geagaageag tageageggg gaceaateat cagacteett gaacteecee
                                                                    1020
actotgctgg ctctgtaacc cagtgcacct ccctccccag ctccggaggg ggtcctcctc
                                                                    1080
geteeteett eecagggace ageacettea agegeteeag ggeegtgagg geaagagggg
                                                                     1140
gacctgccac cagggagett cetggetetg ggggacccag gtgggactta geagtgagta
                                                                     1200
ttggaagact tgggttgatc tcttagaagc catgggacct cctccctcat tcatcttgca
                                                                     1260
agcaaatccc atttcttgaa aagccttgga gaactcggtt tggtagactt ggacatctct
                                                                     1320
ctggcttctg aagagcctga agctggcctg gaccattcct gtccctttgt taccatactg
                                                                    1380
tctctggagt gatggtgtcc ttccctgccc caccacgcat gctcagtgcc ttttggtttc
                                                                     1440
accttecete gaettgaece ttteeteece cagegteagt tteacteect ettggttttt
                                                                     1500
atcaaatttg ccatgacatt tcatctgggt ggtctgaata ttaaagctct tcatttctgc
                                                                    1560
aaaaaaaaa gtcgacgcgg ccg
                                                                     1583
```

```
<210> 6286
<211> 2340
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (94)...(2121)
<223> similar to gi4753778 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6286 tttcgtccgc cctgtaggcc cgcctctcca gcaacctgac acctgcgccg cgccccttca 60 etgegtteee egeceetgea geggeeaeag tggtgeggee ggeggeegag egttetgagt 120 caccegggae tggaggtagg aacceageea tggtgaaega agceagagga aacageagee 180 tcaacccctg cttggagggc agtgccagca gtggcagtga gagctccaaa gatagttcga 240 gatgttccac cccgggcctg gaccccgagc ggcatgagag actccgggag aagatgaggc 300 ggcgattgga atctggtgac aagtggttct ccctggaatt cttccctcct cqaactqctq 360 agggagetgt caateteate teaaggtttg aceggatgge ageaggtgge eccetetaca 420 tagacgtgac ctggcaccca gcaggtgacc ctggctcaga caaggagacc tcctccatga 480 tgatcgccag caccgccgtg aactactgtg gcctggagac catcctgcac atgacctgct 540 gccgtcagcg cctggaggag atcacgggcc atctgcacaa agctaagcag ctgggcctga 600 agaacatcat ggcgctgcgg ggagacccaa taggtgacca gtgggaagag gaggagggag 660 getteaacta egeagtggae etggtgaage acateegaag tgagtttggt gaetaetttg 720 acatetgtgt ggcaggttac cccaaaggcc accccgaagc agggagcttt gaggctgacc 780 tgaagcactt gaaggagaag gtgtctgcgg gagccgattt catcatcacg cagcttttct 840 ttgaggctga cacattcttc cgctttgtga aggcatgcac cgacatgggc atcacttgcc 900 ccatcgtccc cgggatcttt cccatccagg gctaccactc ccttcggcag cttgtgaagc 960 tgtccaagct ggaggtgcca caggagatca aggacgtgat tgagccaatc aaagacaacg 1020 atgctgccat ccgcaactat ggcatcgagc tggccgtgag cctgtgccag gagcttctgg 1080 ccagtggctt ggtgccaggc ctccacttct acaccctcaa ccgcgagatg gctaccacag 1140 aggtgctgaa gcgcctgggg atgtggactg aggaccccag gcgtccccta ccctgggctc 1200 tcagcgccca ccccaagcgc cgagaggaag atgtacgtcc catcttctgg gcctccagac 1260 caaagagtta catctaccgt acccaggagt gggacgagtt ccctaacggc cgctggggca 1320 attectette ecetgeettt ggggagetga aggaetaeta eetettetae etgaagagea 1380 agtcccccaa ggaggagctg ctgaagatgt ggggggagga gctgaccagt gaagaaagcg 1440 tetttgaagt etttgttett taeetetegg gagaaceaaa eeggaatggt caeaaagtga 1500 cttgcctgcc ctggaacgat gagcccctgg cggctgagac cagcctgctg aaggaggagc 1560

```
tgctgcgggt gaaccgccag ggcatcctca ccatcaactc acagcccaac atcaacggga
                                                                    1620
ageogteete egaceeeate gtgggetggg geeceagegg gggetatgte ttecagaagg
                                                                    1680
cctacttaga gtttttcact tcccgcgaga cagcggaagc acttctgcaa gtgctgaaga
                                                                    1740
agtacgaget cegggttaat taccacettg teaatgtgaa gggtgaaaac atcaccaatg
                                                                     1800
cccctgaact gcagccgaat gctgtcactt ggggcatctt ccctgggcga gagatcatcc
                                                                    1860
agcccaccgt agtggatccc gtcagcttca tgttctggaa ggacgaggcc tttgccctgt
                                                                     1920
ggattgagcg gtggggaaag ctgtatgagg aggagtcccc gtcccgcacc atcatccagt
                                                                    1980
acatccacga caactacttc ctggtcaacc tggtggacaa tgacttccca ctggacaact
                                                                    2040
gcctctggca ggtggtggaa gacacattgg agcttctcaa caggcccacc cagaatgcga
                                                                    2100
gagaaacgga ggctccatga ccctgcgtcc tgacgccctg cgttggagcc actcctgtcc
                                                                    2160
egectteete etecacagtg etgettetet tgggaactee aeteteette gtgtetetee
                                                                    2220
caccceggce tecaetecee cacetgacaa tggcagetag actggagtga ggettecagg
                                                                    2280
ctcttcctgg acctgagtcg gccccacatg ggaacctagt actctctgct ctaaaaaaaa
                                                                    2340
```

```
<210> 6287
<211> 1156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1157)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1102)...(484)
<223> similar to gi5565870 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6287
ttttttttt ttgtcgccac agcagcggac acgtttaatg gcaggcgcct ctacagttac
                                                                       60
aagacatgcc tgaggtcagt tcgccccctt agggggcact ccccgagcta aacacagatg
                                                                      120
acagcgaccc agggtgctgg aggcccgggg tcacctgagg actgcagaag tcctgcgctc
                                                                      180
cgctaactgt gtggacacgc ggctgccagg ggcacaggta ggcaacatgg atgggaagag
                                                                      240
ageccaggee geeecegtet cacagetgea gageaegeag accaeggeae tgeaggeeaa
                                                                      300
ccaggcagag ctgctggtgc gacacatcct ggggctgggc tggtcgggga gaagctctcc
                                                                      360
ggctgacgct gcctgggcct gcccctgcag ggcccgggaa ccgagcccag gcctctgttt
                                                                      420
ctctgagagg ctggagcaga gcccttggtg gccctggaaa gcggctgcaa ggtggcctta
                                                                      480
gtcaggggag gcacgcgggc gtcgcgtcca gaatcttctg ggctatggag gtgagtgcag
                                                                      540
cgaaggcggg gctcccaggg aactcctgga tgaagtcgtg gccctcctcc agggtcctca
                                                                      600
tgagcgcagg gtccaggggc acggagccta agaagggcac cccggcgagc tgggccagct
                                                                      660
ceteteegee geeeetggag aagacgetgg tgcacteegt geagtgtggg caggtgaage
                                                                      720
cgctcatatt ctccacgatt cccatcaccc gcaagcccgt cttcctacag aaggtcagct
                                                                      780
cgcgcctcac gtccccacg gacaccgcct ggggcgtggt gaccacgagg gcccccaggg
                                                                      840
gctggtaggg acgcagggct tctatggtgg ccatgtgctc atcggaggtc cccgggggcg
                                                                      900
tgtccaccac caggtagtcc agctccccc aggccacgtc ggacacaaac tgctttatca
                                                                      960
gcgcttcttg cctgcatggc gcagtgccag ggccagctcc gtggagatgg tgcttttccc
                                                                     1020
aacgcccccc tttcctgaga ggaccaggat gatgtgcctg acgccggcca ggtttccagg
                                                                     1080
entgeegeeg cetecatece geegeeteea ggagetegng getgeaegte ettaceegeg
                                                                     1140
```

```
<210> 6288
<211> 4379
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (212)...(3470)
<223> similar to gi3327146 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6288 gaateetggt egacgattee egeettteea geatgeaggg getgeteagg taagggggae 60 geteeteett geeegeegea eteatteatt aagtggeaet geteagtggt gegggggtgg 120 gegtgettee gtgggetggg egetgggtte geggegegee etectgetge eteceeggag 180 ctcccgggcc agtagcgttt agtcacatca agaaatagaa cagaattcag ccatggcccc 240 300 aagaaagaga ggtggacgag gtatttcatt catcttttgc tgtttccgaa ataatgatca 360 cccagaaatc acgtatcggc tgcgaaatga tagcaacttt gcgcttcaga ccatggaacc agcattgccc atgccccctg tggaggagct ggatgtcatg ttcagtgaac tggtggatga 420 actggacctc acagacaaac acagagaagc catgtttgca cttccagctg agaaaaaatg 480 540 gcaaatatac tgtagcaaga aaaaggacca ggaagaaaac aagggagcta caagttggcc tgaattctac attgatcagc tcaattccat ggctgctaga aaatctctgc tggctttaga 600 gaaggaagaa gaagaagaaa gaagtaaaac tatagagagt ttaaagacag cactgaggac 660 aaaaccaatg aggtttgtaa ccagattcat cgacttggat ggcctatcat gtatcctcaa 720 ctttctaaag accatggact acgagacctc agagtctcga atacatactt ctctcattgg 780 ctgtataaaa gcgttaatga acaactctca aggccgggct cacqtcctgg ctcattctga 840 gagtattaat gtaattgctc agagtctgag cacagagaac attaaaacga aggtggccgt 900 gctggaaatc ttgggcgccg tgtgcctggt tcccgggggc cacaagaagg ttctgcaggc 960 catgetgeac taccagaagt atgecagega aaggaceege tttcagacat taattaacga 1020 cttggataaa agcactgggc ggtatcgaga tgaagtgagt ctcaagactg ccatcatgtc 1080 cttcattaat gcagtgctca gccaaggtgc aggagtggag agtttggact ttagacttca 1140 tettegetat gaaatttetg atgttaggaa tteaccetgt aatggataaa ttaaggaaac 1200 acgaaaattc aacattagat aggcatttag acttttttga aatgctccga aatgaagatg 1260 aactagaatt tgccaaaaga tttgaactgg ttcacataga cacaaaaagt gcaactcaga 1320 tgtttgagct gaccaggaag aggctgacac atagtgaagc ttacccgcat ttcatgtcca 1380 tectgeacca etgeetecaa atgeettaca agaggagtgg caacactgtt cagtactgge 1440 tactactaga tagaattata cagcagatag ttatccagaa tgacaaagga caggaccctg 1500 actecacace tttggaaaac tttaatatta agaatgtegt acgaatgttg gttaatgaaa 1560 atgaagttaa gcagtggaaa gaacaagcgg aaaaaatgag aaaagaqcac aatgaqctac 1620 aacagaaact ggaaaagaaa gaacgagaat gtgatgctaa gactcaagag aaggaagaga 1680 tgatgcagac cttaaataaa atgaaagaga aacttgaaaa ggagactact gagcataagc 1740 aagtcaagca gcaggtggcg gacctcacag cacagctcca tgagctcagc aggagggccg 1800 tetgtgette aateceaggt ggaceetege etggageace aggagggeee ttteetteet 1860 etgtgeetgg ateteteett cetececeae caceceaec tetaceaggt gggatgette 1920 eccetecace geotecoete cotecaggtg geoctectec teccecaggg cotectecet 1980 taggggcaat catgccacct cctggtgctc caatgggcct agcactgaag aagaaaagca 2040 ttcctcagcc cacaaatgcc ctgaaatcct tcaactggtc taaactgccc gagaacaaac 2100 tggaaggaac agtatggacc gaaattgatg atacaaaagt cttcaaaatt ctagatcttg 2160

```
aagacctqqa aagaaccttc tctgcctatc aaaqacaqca ggatttcttt qtqaacaqta
                                                                    2220
actecaagea gaaagaagea gatgeeattg atgaeactet gagtteeaaa ettaaagtta
                                                                    2280
aagagettte ggtgattgat ggteggagag eteagaattg caacateett etategaggt
                                                                    2340
tgaaattatc caatgacgaa atcaaacggg caattctaac aatggacgaa caggaagatc
                                                                    2400
tgcccaagga catgttggaa cagctcttga aatttgttcc tgaaaaaagt gacattgacc
                                                                    2460
tattggagga acataaacat gaactggatc ggatggccaa ggctgatagg ttcctttttg
                                                                    2520
agatgagccg aattaatcac tatcaqcaaa qqttqcaatc qctqtacttc aaaaaqaaqt
                                                                    2580
ttgcagagcg tgtggcagaa gtgaaaccta aagtggaagc aattcgttct ggctcagaag
                                                                    2640
aggtgtttag gagtggtgcc ctcaagcagt tgctggaggt ggttttggca tttggaaatt
                                                                    2700
atatgaataa aggtcaaaga gggaatgcat atggattcaa gatatctagc ctaaacaaaa
                                                                    2760
ttgctgacac aaaatccagc atcgacaaaa acattaccct tttgcactat ctcatcacta
                                                                    2820
ttgtggaaaa taagtacccc agtgttctca atctaaatga agaattgcga qatattcctc
                                                                    2880
aagctgcgaa agtaaacatg actgagctgg acaaagaaat aagtaccttg agaagtggct
                                                                    2940
tgaaagcagt agagacagag ctggaatatc agaagtctca gccccacag cccggagata
                                                                    3000
agtttgtgtc tgttgtcagc cagttcatca cagtagccag cttcagcttc tctgatgttq
                                                                    3060
aagaccttct agcagaagct aaagacctgt ttactaaagc agtgaagcac tttqqqqaaq
                                                                    3120
aggctggcaa aatacaacca gatgagttct ttggcatttt tgatcaattt cttcaagctg
                                                                    3180
tgtcagaagc caaacaagaa aacgaaaata tgagaaagaa aaaggaggaa gaagaacgtc
                                                                    3240
gagetegeat ggaageteag eteaaagaae aaegtgaaag qqaaegtaaa atqagaaaag
                                                                    3300
ctaaagagaa tagtgaagaa agcggagagt ttgatgacct tgtttcagct ttacgctcag
                                                                    3360
gagaagtgtt tgacaaagac ctttctaaat tgaaacggaa tcgcaaacgt attaccaacc
                                                                    3420
agatgactga cagcagcaga gagagaccaa tcacaaaact taatttctaa ttttccatqa
                                                                    3480
atacttttt ttagaaagct cattagcagc cctctaaagt gactagaacg tttcattaca
                                                                    3540
ctgccttgca atccaaacag tggcaatttt ttccttcatc tgtgagtgaa tgtgtgaacg
                                                                    3600
tgtgtatgta aatgtatgtg tgtatatatt aaaaaatgta tatagatgtc tgagtgttgt
                                                                    3660
ctggagacct atacgtatgg ttaaaaagat ttatgttaat gtatgtgctc caaaaccttt
                                                                    3720
cgtgtatgca ttcacattga gtgtggctca ttttctttcc ccgaacgcca tgactgttca
                                                                    3780
gaagcacaat actatctcct gaaagagata agagacattc cctagattca aaggcaaaac
                                                                    3840
agaagaaaca aacaaacaaa caaacaaagc ttgcaaaata ttttatggtt tccaagcttg
                                                                    3900
atatccttta aaattatttt cattgatgga actggagttg ttggaaaaac atagatttaa
                                                                    3960
aatgattttt gatagctgac attgtgatgt tgatgtatca catcagtaaa taggaccagc
                                                                    4020
tttgaatttc tgacattggt gtggggatac agtctgtaaa tgtttattga gaaccatctt
                                                                    4080
gcacacaatt tgaattatgt agaatgtcaa tcaagttttt gatatattta aaagttggac
                                                                    4140
atcaattttt teccetgatt teatecaagt tatetetgee aagtgetett gataatttet
                                                                    4200
tcagattttt ggaaaaaaac actatataaa atgcaatcca tgctttttt aaagaacaac
                                                                    4260
attgccagag tatgcttgtt ctaacaatat agatatataa accttaaaaa taataaaata
                                                                    4320
teteacecaa gaettaaagg aagaattete tgaagggata aagattaeta aaaaaaaaa
                                                                    4379
```

```
<210> 6289
<211> 1596
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (706)...(186)
<223> similar to gi1825739 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6289

```
60
tcgtgccggt gaaagtttgc tatttattta gtcttagaaa aacactgaaa gaaaaaggca
ggaaatgtag tacgcagtgt ggaagaatgg agctggccac atgtagtttt agcagctgca
                                                                      120
                                                                      180
gaggaaactg gctgagtcta aggttacata tttctgctca gtaagggtat ccatggtgat
                                                                      240
aactctcatg atgacggtag tcatcctggt aaccatcctg ttctgtttta cctccttttt
tettettget ettetette tettgettge tetttttete agaettette atttgetttt
                                                                      300
cactettaag taacttgtet gegtteteat tetteatett tittitette teettetetg
                                                                      360
gtttctcaag cttttcatgc tttttagact cctttgcttt tttaagggga acattcccca
                                                                      420
cctgcagctc gtcctccagc tgagaggcag taggccggct gaggtcatac ttctcctcat
                                                                      480
actcattact aagaattttg tcctgggcct tctttttggg aggtttctcc tttgctggct
                                                                      540
tgggaggace tggcaccaca tttgggtete ggtggccatg ttcccgcctg tccatgcggt
                                                                      600
                                                                      660
tgtcccggaa acggcctggg ccagcagccc ttgtgctggg ttctgagatg gtggtgggag
                                                                      720
gggcatttgt gaagetetee aagetggtgg cettgetggg cetcetggtt gtetgtggee
tetecetgtg etgateette egggatggag ggtaaagatt etetgaaact gagggtetee
                                                                      780
tggcagtgat cacctcagtg gttgtagggg gcctgtggga gggtgagggg gtccagggcc
                                                                      840
tetgegtggt gggaaaggea gtggtggtea taggtettge ageaactgtt accgeceggg
                                                                      900
acgtggaccg agtcactgtt gtggctgggg caggaggaag ggtggtggct ctgggggttg
                                                                      960
agggaggttg gggcaaagct ggtgcagtgg cggccagttt tctcaggacc ttcacccgac
                                                                     1020
tetetetggt tggtgggaet tgtgetetee ttgggteete tttettette tegetqeeea
                                                                     1080
ggettggeet teetgeteee cetecacegt catteceete egecaceace tggeeeteta
                                                                     1140
caccagagge ettacattte tggacaaage cettetgeet gatetteteg atectaegga
                                                                     1200
tggggccttg gtcgatgacc tcgtacatgg cttccagcct aacgggatat ggatagcgct
                                                                     1260
cotcoacctg cagogtotto ttoagcagoa coatgocaaa ottgocotto tocagottoa
                                                                     1320
ggaageteat eagettaggg atgaggetag ggteeagggg etgeteeagg atetggeeet
                                                                     1380
egetggtgat cetteteace ttgcetectt ceteacetge etggtggaag ageacaatet
                                                                     1440
gttggatgtg cctctccgcc agctcacagt acacatcgtc cttcagcagg ctcatcatga
                                                                     1500
ggeggtagta gccttccgag gcatgagggg ctgagatgac ccatactctg tccttgccag
                                                                     1560
ctttcgcacg agtggcgtct cctcccaagg gctcca
                                                                     1596
```

```
<210> 6290
<211> 2526
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (216)...(1361)
<223> similar to gi4914573 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6290
tttcgtctgc ggagaccgtc cgcctggctc gcccgagctc gcccgctgtc cgccagcccg
                                                                      60
egggagggag gagagaageg aagegtttee geggttgget acteagtgte ttggteteaa
                                                                      120
gttgcctcat tgcggctggc gttcccaata cagacgcatc gtttcttttt taatactccc
                                                                      180
taagaaaggg aataaccttc aagctggcgg gagcaatggt tcacataaag aaaggcgagc
                                                                      240
tgacccagga ggagaaggag ctactggaag tcatcgggaa aggtactgtc caagaagctg
                                                                      300
gaacattatt atccagcaag aatgttcgtg tcaactgttt ggacgagaat ggaatgactc
                                                                      360
ctctaatgca tgcagcatat aaaggaaaac tggatatgtg caaattacta ctgcgacatg
                                                                      420
gageegatgt aaattgteat eageatgaae atggataeae ageeeteatg tttgetgeae
                                                                      480
tttctggtaa taaagacatc acatgggtaa tgttagaagc tggtgctgag acagatgttg
                                                                      540
tcaactctgt gggaagaaca gcagctcaga tggcagcctt tgtgggtcaa catgattgtg
                                                                      600
```

```
tgaccataat caacaatttc tttcctcgag agagactgga ttattacact aagccccagg
                                                                      660
gactggataa agagccaaaa ctgcccccaa agttggcagg cccgctgcac aaaattatca
                                                                      720
ccacaacgaa tetteateet gteaagateg tgatgettgt aaatgagaat cetetgetga
                                                                      780
cagaagaagc agccctgaat aaatgctaca gagtgatgga tttgatttgt gagaaatgta
                                                                      840
tgaagcaaag agacatgaat gaagtattgg ctatgaagat gcattacata agctgtatct
                                                                      900
ttcagaaatg cattaacttc ttaaaagatg gagagaataa actggacacc ttgatcaaaa
                                                                      960
gcttgttaaa aggcccgagc ttctgatggc tttccagtgt atccagaaaa gatccttaga
                                                                     1020
gaaagtatca gaaaaattcc cttactgtga agctacactc ctccagcagc tggttcgaag
                                                                     1080
cattgeteet gttgaaattg gttetgatee caetgeatte teegteetta eecaageeat
                                                                     1140
cactggccag gtgggttttg tggatgtgga attttgcact acctgtggag aaaagggagc
                                                                     1200
aagtaaaaga tgttcagttt gcaaaatggt aatatattgt gatcaaacct gccagaaaac
                                                                     1260
acactggttt actcataaga aaatctgtaa gaatctgaag gacatttacg aaaagcaaca
                                                                     1320
gttggaggct gccaaagaaa agagacaaga ggaaaaccac ggcaaacttg atgtcaattc
                                                                     1380
taactgtgtt aatgaagagc aaccagaggc tgaagtaggt atctctcaaa aggattccaa
                                                                     1440
tcctgaagat tccggggaag gaaagaaaga atctcttgaa agcgaagctg agttggaagg
                                                                     1500
cttacaggat gctcctgcag ggccacaggt gtctgaggag taaaagccag agcaagtgcc
                                                                     1560
agtgtggatg gtcctcaccc tgcaagaagc tggaaaactc ctaggaatgc attgtcctca
                                                                     1620
ccttgttata cctgcgtggc accatggcag gattccacat ttcatagaat acaggttttc
                                                                     1680
aagcaaaccc ctgttgacca tgccctaatt tcctattgat ttctgttgta taattgaatg
                                                                     1740
gatattccta tggaaaattt tttgtttcaa aatacaggaa aaacattcct attacctttc
                                                                     1800
tgaggctggc tttccagcaa ttgtttcaaa ggaaaataga tccccttaaa gaaaaaatac
                                                                     1860
aggctttagg gaacaaaggg acaagcagaa caggtgtgga agagagattt tcaggaaggg
                                                                     1920
aaaaatttat agctacagag ggtagttaga aaaatcataa cttatatgtg aataaaatac
                                                                     1980
atataagcag catttacggt agtggcattc tacttattaa gatgcaatga aatgaagaaa
                                                                     2040
ggctttatgt tcaaggacct ttgccatagt tcagctaatt gtagttttat atagaaatga
                                                                     2100
tectgaacae tetgaacttg acgtagteet geggtgatat tetatetgea gtatttgtae
                                                                     2160
ctccagaatg gcagatccct cagcaggaac aaaggcatat tgacggttct ctcagcgtat
                                                                     2220
gcattaaaaa aggtacttcc tgaaactttt gattcaataa tgactaaaca tactatgtac
                                                                     2280
acaattactg taaggctaat tcacgtgcca tactccacct gaaagcctga gttatcttgc
                                                                     2340
tataagcttt tcatggagca cttcctttcc agaaactgat ttgtaactca tttagagaat
                                                                     2400
gtcctggcgt cggtttttag catatgtggt atttaaacag agctagaatg tgatgtctga
                                                                     2460
agataatgct gcatttctgg gtttcttgtg tggattttaa aataaattgt gcctacaaat
                                                                     2520
ataaac
                                                                     2526
```

```
<210> 6291
<211> 5840
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (398)...(4178)
<223> similar to gi2204213 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6291

cgcgcccctg ccgcggccc tagctcgcc ctcagctccc tcccctttcc gggcaggccc gtcccgtcag caaggcagtg agcaccgcgg ccagcagagg gcggtccgga cccaagtctg 120
cagcggcgcc attggcgtgt ggaaaatgcc accagatggc gggttaggat tgcagctccg ttgaaggcgc tgaaggcgc ccggaaggcc ccggaaggcc ccggaaggcc cccgaacac cccgtaacaa ccccccaca 240
```

```
tegggaataa cacaceggag acttttgggg ggaaactagg tegatggteg geggegeeeg
                                                                      300
gatgggcagc tgaggattgc ctttgaggtt attttaaaag ttttgagttg tacagcactt
                                                                      360
gattattttg ctgcattgtg aaaggacctc tccagcaatg attacttcag aattaccagt
                                                                      420
                                                                      480
gttacaggat tcaactaatg aaactactgc ccattccgat gctggcagcg agcttgaaga
aacagaggtc aaaggaaaaa gaaaaagggg tcgtcctggc cggcctccat ctacaaataa
                                                                      540
                                                                      600
gaaacctcga aaatctccag gtgagaagag cagaattgaa gctggaatta gaggagcagg
ccgtggaaga gctaatggac accctcaaca gaatggggaa ggggagcctg tcacattatt
                                                                      660
tgaggtggtg aaactgggga aaagtgcaat gcagtccgtg gtggatgact ggattgaatc
                                                                      720
atataaacaa gacagggaca tcgcacttct ggatttaatc aactttttta tccagtgttc
                                                                      780
aggatgtcga ggtactgtga gaatagagat gtttcgaaat atgcagaatg cagaaatcat
                                                                      840
cagaaaaatg actgaagaat ttgatgagga cagtggtgat tatcctctta ccatgcctgg
                                                                      900
acctcagtgg aaaaaatttc gttcaaactt ttgtgaattt attggagtcc tgattcgaca
                                                                      960
gtgtcagtat agcataattt atgatgagta tatgatggac acagtaatct cccttttgac
                                                                     1020
gggtttgtca gactcccagg tcagagcttt taggcataca agtaccctgg ctgccatgaa
                                                                     1080
gctcatgact gctctggtga atgttgcctt aaacctcagt attcatcagg ataataccca
                                                                     1140
gagacaatat gaagccgaga gaaataaaat gattgggaag agagccaatg aaaggttgga
                                                                     1200
gttactactt cagaaacgca aagagctgca agaaaatcag gatgaaatcg aaaatatgat
                                                                     1260
gaactctatt tttaagggta tatttgttca tagatacccg tgatgctatt gctgagatta
                                                                     1320
gagccatttg tattgaaaga aattggagta tggatgaaaa tgtatagtga tgccttccta
                                                                     1380
aatgacagtt acctaaaata tgttggctgg actcttcatg acaggcaagg ggaagtcagg
                                                                     1440
ctgaagtgtt tgaaagctct gcagagtcta tataccaata gagaattatt ccccaaattg
                                                                     1500
gaactattca ctaaccgatt caaggatcgc attgtatcaa tgacacttga taaagaatat
                                                                     1560
gatgttgctg tggaagctat tcgattggtt actctgatac ttcatggaag tgaagaagct
                                                                     1620
ctttccaatg aagactgtga aaatgtttac cacttggtgt actcggcaca tcgccctgtt
                                                                     1680
gctgtggcag ctggagagtt ccttcacaaa aagctattta gcagacatga cccacaagca
                                                                     1740
gaagaagcat tagcaaagag gaggggaaga aacagcccga atggaaacct cattaggatg
                                                                     1800
ctggttcttt tctttcttga aagtgagtta catgaacatg cagcctactt tggtggacag
                                                                     1860
tttatgggag agctctcaag aactgttgaa agactgggaa tgtatgacag agttgctatt
                                                                     1920
agaagaacct gttcaaggag aggaagcaat gtctgatcgt caagagagtg ctcttataga
                                                                     1980
gctaatggtt tgtacaattc gtcaagctgc tgaggcacat cctccagtgg gaaggggtac
                                                                     2040
cggcaagaga gtgctaactg ccaaagaaag gaaaactcaa attgatgata gaaacaaatt
                                                                     2100
gactgaacat tttattatta cacttcctat gttactgtca aagtattctg cagatgcaga
                                                                     2160
gaaggtagca aacttgctac aaatcccaca gtattttgat ttagaaatct acagcacagg
                                                                     2220
tagaatggaa aagcatctgg atgctttatt aaaacagatt aagtttgttg tggagaaaca
                                                                     2280
cgtagaatca gatgttctag aagcctgcag taaaacctat agtatcttat gcagtgcaag
                                                                     2340
aatataccat ccagaacaga gttgacatag ctcgaagcca gctgattgat gagtttgtag
                                                                     2400
atcgattcaa tcattctgtg gaagacctat tgcaagaggg agaagaagct gatgatgatg
                                                                     2460
acatttacaa tgttctttct acattaaagc ggttaacttc ttttcagaat gcacatgatc
                                                                     2520
tcacaaaatg ggatctcttt ggtaattgct acagattatt gaagactgga attgaacatg
                                                                     2580
gagecatgee agaacaggta gtegtgeaag cactgeagtg tteccattat tegattettt
                                                                     2640
ggcagttggt gaaaattact gatggctctc cttccaaaga ggatttgttg gtattgagga
                                                                     2700
aaacggtgaa atcctttttg gctgtttgcc agcagtgcct gtctaatgtt aatactccag
                                                                     2760
tgaaagaaca ggctttcatg ttactctgtg atcttctgat gattttcagc caccaattaa
                                                                     2820
tgacaggtgg cagagaggc cttcagcctt tggtgttcaa tccagatact ggactccaat
                                                                     2880
ctgaactcct cagttttgtg atggatcacg tttttattga ccaagacgag gagaaccaga
                                                                     2940
gcatggaggg tgatgaagaa gatgaagcta ataaaattga ggccttacat aaaagaagga
                                                                     3000
atctacttgc tgctttcagc aaacttatca tttatgacat tgttgacatg catgcagctg
                                                                     3060
cagacatett caaacaetae atgaagtatt acaatgaeta tggtgatatt attaaggaaa
                                                                     3120
cactgagtaa aaccaggcag attgataaaa ttcagtgtgc caagactctc attctcagtt
                                                                     3180
tgcaacagtt atttaatgaa cttgttcaag agcaaggtcc caacctagat aggacatctg
                                                                     3240
eccatgicag iggeattaaa gaaciggeae giegettige eettacatti ggattiggace
                                                                     3300
agattaagac acgagaagca gttgccacac ttcacaagga tggcatagag tttgcattta
                                                                     3360
aataccaaaa tcagaaagga caagagtatc cacctcctaa tctggctttt cttgaagtac
                                                                     3420
taagtgaatt ttcttctaaa cttcttcgac aggacaaaaa gacagttcat tcatacctag
                                                                     3480
agaaatteet taeegageag atgatggaaa ggagggagga tgtatggett ceacteatet
                                                                     3540
cctatagaaa ttcattagtc actgggggtg aagatgatag aatgtctgtg aacagtggaa
                                                                     3600
gtagcagcag caaaacctca tcagtaagga ataagaaagg acgacctcca cttcataaaa
                                                                     3660
```

```
3720
aacgagtaga agatgagagt ctggataaca catggctaaa caggactgac accatgattc
agactectqq ceceetqeea geaceacaac teacatecae tgtactgegg gagaacagte
                                                                     3780
ggcccatggg agaccagatt caagaacctg agtctgaaca tggttctgaa ccagactttt
                                                                     3840
tacacaatcc tcagatgcag atctcttggt taggccagcc gaagttagaa gacttaaatc
                                                                     3900
                                                                     3960
qqaaqqacag aacaqqaatg aactacatga aagtgagaac tggagtgagg catgctgttc
qqqqtctaat qqaqqaaqat qctqaqccca tctttqaaqa tgtgatqatq tcatcccqaa
                                                                     4020
gecagttaga agatatgaat gaagaatttg aggacaccat ggttattgat etgeeteeat
                                                                     4080
caagaaatcg gcgagagaga gctgagctaa ggccagactt ctttgactct gcagctatca
                                                                     4140
tagaagatga ttcaggattt ggaatgccta tgttctgaag tctgaagaaa atttacaaat
                                                                     4200
ctggaactct attatttaga gctagaggcc tatatactgt gatagcttgt atggggaaaa
                                                                     4260
acacttttga tgtgatctga tttgtttttt aatcaaatga ttaaggtcaa tccctttttg
                                                                     4320
cagtgacaga agaggagcat gtaaattacc caagggaatg ttggtgaatg tcaactcaga
                                                                     4380
aagactgacc tgaaaatcat ttgtgtccta ctattggact tatcccaata cagatgtgtg
                                                                     4440
tgtttttctg gagggaggaa gaaattttaa atttttaaaa cagctgtcaa gataaacact
                                                                     4500
gttatacacc tgttttatga aaactcaaca ttgagtaaaa aaaaacatat ttttaacttt
                                                                     4560
attttcctgt tgtacaattt aaaaaccgtt ttaacatttt gcctttttat gttttaaaag
                                                                     4620
ctaaccattt ttattaaacc tatgaggtaa ggcaggctca tcctaattqc gaaqagtqtt
                                                                     4680
ttgggagttc actggggatt tgggttggac ctttqtggaa cacaaataat qaaqqaqcaq
                                                                     4740
aacattgaca agctaagatg aaattctgac atagtacatc tctgccaaaa accacacac
                                                                     4800
ctctgtggat atggatatga attcccagat tttatatact cttgaataaa ggtttatttt
                                                                     4860
tatttataag tgggcataaa ataagaaatg tccatgcagc catttttcca acagatgctg
                                                                     4920
tacaccgttc attttatata gactagggag attcaaatac agtgcatttt ctattggtat
                                                                     4980
ttgttctgtg catttttagc aacttctacc agcaaataaa gtattctcag taaaacgaaa
                                                                     5040
atgattetea agttateagt ttgetgtttt taccaettat tteatgeect gecaaattea
                                                                     5100
agttacacag acttccattt tcttaagata atcaatcatg aagaaatcct ttatcaatca
                                                                     5160
ttcaaaagta attttaagtg taacataact gtgtttactt cccatgcact taataccctt
                                                                     5220
atgcgctaat tttgtgaatt aagttactga ttatagaagt atgtgctgca tagaagtctg
                                                                     5280
tgcttagagg gtgaagttcc taagcttacc ttgaattaca gctacatttc agtgttaaat
                                                                     5340
gtgcatatta agaataattc ttttggggaa agaaattatg aatcttcagg acaqtctaca
                                                                     5400
atggtttaga gttacattct gcctagactt ttatgacttg ctgctattgt tttaaaaacc
                                                                     5460
ccacttagtc tcttcctttc tgatttctaa agtaagcctc agaatttcca aaccaattca
                                                                     5520
tecacagetg tttetggget ggtttttaaa gtagetgeaa cagaateatg aggettteee
                                                                     5580
tttttatcaa atacgaaaaa catttttaa aattctgcac acccagtgat catcttttgt
                                                                     5640
gcgggaaagc aagatgatga tggatgattt tattcatcct tttagtaaag acacaaaaca
                                                                     5700
tttttctcaa catttgtaca gttctgaaaa aaacctggtc accaaaaata tcttctctgc
                                                                     5760
taattcagca attcttgggc tccagttagg ggagctgggg cctcactttc tcccaggatt
                                                                     5820
gtgggcttca ctggaagtga
                                                                     5840
```

```
<210> 6292
<211> 4093
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (40)...(2511)
<223> similar to gi3882341 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6292

```
60
attggatcgt agactattag tcagagcggt ggaattcggc ggcggcgcga ggcagtatgg
tttgaagtgg tgaacatgga tttttctcgg cttcacatgt acagtcctcc ccagtgtgtg
                                                                      120
                                                                      180
ccggagaaca cgggctacac gtatgcgctc agttccagct attcttcaga tgctctggat
                                                                      240
tttgagacgg agcacaaatt ggaccctgta tttgattctc cacggatgtc ccgccgtagt
ttgcgcctgg ccacgacagc atgcaccctg ggggatggtg aggctgtggg tgccgacagc
                                                                      300
                                                                      360
ggcaccagca gcgctgtctc cctgaagaac cgagcggcca gaacaacaaa acagcgcaga
                                                                      420
agcacaaaca aatcagettt tagtatcaac caegtgtcaa ggcaggtcac gteetetgge
gtcagctacg geggcactgt cagcctgcag gatgctgtga ctcgacggcc tcctgtattg
                                                                      480
                                                                      540
gacgagtett ggattegtga acagaceaea gtggaceaet tetggggtet tgatgatgat
ggtgatctta aaggtggaaa taaagctgcc attcagggaa acggggatgt gggagccggc
                                                                      600
geogecaccg ggcacaacgg gtttttctgc agcaactgca acatgctgtc cgagcgcaag
                                                                      660
gacgtgetea eggegeacce egeggeeece gggeeegtgt egagagttta ttetagggae
                                                                      720
aggaatcaaa aatgcgacga ctgtaagggc aagaggcacc tcgacgcgca ccccggtcgg
                                                                      780
gcagggaccc tctggcacat ctgggcatgt gcaggttact tcttgctgca gattctgcgc
                                                                      840
                                                                      900
aggateggag etgtgggeca ggetgtgtee aggaeggegt ggteggeeet ttggetggee
gtggttgete cagggaagge ageetetgga gtgttetggt ggetggggat tggatggtae
                                                                      960
cagtttgtta ctttgatttc ttggctgaat gtgtttcttc ttaccaggtg ccttcgaaac
                                                                     1020
atotgoaagt ttttagtott gotoatocca ctottoottt tactaggtot ctoottacgg
                                                                     1080
ggccaggggc aatttetttt cgttettgcc cgtgttgaac tgggcaagca tgcatagaac
                                                                     1140
acagegggtg gatgacecee aggaegtgtt taaacecaeg acttetegee tgaageagee
                                                                     1200
                                                                     1260
tetgeagggt gaeagtgagg etttteegtg geattggatg agtggegtgg ageageaggt
ggcctctctg tctggacagt gccaccacca tggtgagaat ctccgagagc tgaccacttt
                                                                     1320
                                                                     1380
gctacagaag ctgcaggctc gggtggacca gatggaaggc ggcgctgccg ggccgtcagc
tteggteaga gacgetgtgg gacageeece gagggagaet gaetttatgg eettteacea
                                                                     1440
agaacatgaa gtgcgtatgt cacacttgga agatattctg ggaaaactga gagaaaaatc
                                                                     1500
tgaggccatc cagaaggaac tagaacagac caagcaaaaa acaatcagtg cggttggtga
                                                                     1560
                                                                     1620
gcagetectg eccaeagteg ageaceteca getggagetg gateagetaa agteagaget
gtccagctgg cgacacgtga agaccggctg tgagacagtg gatgccgtac aagaaagagt
                                                                     1680
ggacgtgcaa gtcagagaaa tggtgaaact cctgttttcc gaagatcagc aaggcggttc
                                                                     1740
tctggaacag ctgctgcaga ggttctcatc acagtttgtg agcaaaggcg acttgcagac
                                                                     1800
                                                                     1860
gatgctgcga gacctgcagc tgcagatcct gcggaacgtc acccaccacg tttccgtgac
caagcagete ecaaceteag aagcegtggt gtetgetgtg agegaggegg gggegtetgg
                                                                     1920
aataacagag gcgcaagcac gtgccatcgt gaacagcgcc ttgaagctgt attcccaaga
                                                                     1980
taagaccggg atggtggact ttgctctgga atctggtggt ggcagcatct tgagtactcg
                                                                     2040
ctgttctgaa acttacgaaa ccaaaacggc gctgatgagt ctgtttggga tcccgctgtg
                                                                     2100
gtactteteg cagteceege gegtggteat ceageetgae atttaceeeg gtaactgetg
                                                                     2160
ggcatttaaa ggctcccagg ggtacctggt ggtgaggctc tccatgatga tccacccagc
                                                                     2220
                                                                     2280
egeetteact etggageaca teectaagae getgtegeea acaggeaaca teageagege
ccccaaggac ttcgccgtct atggattaga aaatgagtat caggaagaag ggcagcttct
                                                                     2340
gggacagttc acgtatgatc aggatgggga gtcgctccag atgttccagg ccctgaaaag
                                                                     2400
accogacgac acagetttcc aaatagtgga acttcggatt ttttctaact ggggccatcc
                                                                     2460
tgagtatacc tgtctgtatc ggttcagagt tcatggcgaa cctgtcaagt gaagacacta
                                                                     2520
ctcattattt ttgtacattt ttgtatatac tgggacagcg tgaaacactg gaatccttca
                                                                     2580
tggacgaggg catatacaat gatgggacag tgccacactc cttcaataaa cgtggctgct
                                                                     2640
ggccagagga cgtgagcgtg tgacgggcgc cttggcgcca cctgttgggt gctcactgcc
                                                                     2700
tetgcaggtg cagaggggtc agcagcagga gaagcgtgtt gaacacgtgg ctetcagaca
                                                                     2760
ctccttgttt ttaacgggaa gctctttgca tttgcatttc ctcaacaaag gagcaaagca
                                                                     2820
gaggaagetg agagtetgge gtgttettga egetttggte tteageettg eaetggetet
                                                                     2880
tctaaaggac ttttggaggg cagataattt catctgttaa atccaacaca catttctttc
                                                                     2940
agggaaaaac aatgtcacca aattttcaga gttctaaact cctttccttc aagccggaat
                                                                     3000
tttccttttt tcagcaccag taggtactaa gtctccagat ggggaaataa ctaaaatgtg
                                                                     3060
tttttctgct ttgttcgctc ttacttctga ggaaggtttc cagtcaggac tcgctgtacc
                                                                     3120
aatatccatg gaggaatatg ggagcgtttc gctctccttg taggctgaag tcagtctgac
                                                                     3180
ttgaaggggc ctggtttgga tctaagcaaa cacccagatg gggttctctg gtctcagcaa
                                                                     3240
ggcttttcct gttgggagtc acagtaaaca gaaacccaaa aatctcatct tgggtgtttt
                                                                     3300
cagggettgt tttgagtttt getgaatagg gagegeaaga egeeetgage etecetetea
                                                                     3360
ctggtggtga taagaggagc cgtctggtgt gtcagggtca cgaacccgtt acatttcagg
                                                                     3420
```

```
acgatecttt tteetteage ageatttett actggetgtg getggaatet geettttate
                                                                    3480
acagetytea ceatteteae gtgattetty tqaqaetett tttggttata attactattt
                                                                    3540
aatatttaga ctattttact gagcagactt tataaatgag atatctacaa ggcacttaaa
                                                                    3600
gtgttacaga tgttttacct taagaattat ttaagttgtg ttgggttaag acagttttca
                                                                    3660
gtgtaccgta aatgttgtgt tttcagaaaa agacaaaacg atggtqctga ctggttttct
                                                                    3720
gtatattgca caacagtcct caaatacact gatgtatgaa actattcata catcaagcag
                                                                    3780
catttttttc actctcctta gaattggaac tatgcagtta aggcagataa aatgtacaga
                                                                    3840
tgtttcatat attacaggtt acatatataa atcaaaattt cctatataaa actgatttgg
                                                                    3900
gatttggggt ggaaatattt tgaatattaa tttattttta aagatgcaag ataggacttt
                                                                    3960
gtgcaatgta tttttgtaaa tgcttttcaa aatatctgtc tttggtagtg cttctgctgc
                                                                    4020
tgccaccaaa ttgataagat gctattaaga ggtttaaata aagagtttta atttttaaaa
                                                                    4080
                                                                    4093
gggaaaaaaa aaa
```

```
<210> 6293
<211> 1110
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (448)...(695)
<223> similar to gi3929926 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6293
cctatagttt tgtaattttt tttttttt tttttaacat gaaaaaacac attttattgc
                                                                   60
acttaagtta taagaaaata aaatttctaa gtgaatcaaa ccatagacac aatcccttta
                                                                  120
aaggttgttt tcctccatca tgtcaggttg ttacataact aaaattaacc aacttgaatc
                                                                  180
tgattgtttt aaatcagact ataaataaaa caaacaaaaa aataaacaga aggaggaaaa
                                                                  240
aagategeet aggatacagt gttaaaccae ttteacagtt cagettqaqt tqtqqctett
                                                                  300
ggagaatgag gcaaaccatt tgactgtttc attcattttg tttgtttgca tgtgacgcct
                                                                  360
ttactacaaa aactgaatag tttctgcttt gtcagttact cagagcaata aaactgtaac
                                                                  420
agttgttttc ccaaatactg taaaacacta agactgacca gcaactttat tttaattttg
                                                                  480
tgttttatat atttttaaaa tattttgtca gttttacgat gtacgttcat ccattcacca
                                                                  540
cagccctcaa aaagaaaagt ttctccacag aacaggcaag taatagctct gttccaagga
                                                                  600
atgtgtttta atttttgccc agataaaaga aaataagctt tgcacacact ctcaattctt
                                                                  660
tacttgcagg caaacttcac tctttattat ctgaaactct tccattctca gcctcttaga
                                                                  720
ggcacagatg gctcaagttt cagtggcaaa aagtcttttt tccataacca aactaqaqca
                                                                  780
aatttggaat tcagtctggg actaaaacgt cacagcagaa aaaaaataaa aaaaataatt
                                                                  840
900
agggttggga caacaatccc atatttgaag acctacttct agcaccagca tcaagaatta
                                                                  960
aatccatctc aggactcaca gaacccagga caacttgcca cctttgagca acatatgcat
                                                                 1020
tgaagaatgt atatggaagc aacagtaaat agattaacag aggctaatac tgtqattqat
                                                                 1080
tgacattggc aatggttggc aaaaaaaaa
                                                                 1110
```

```
<211> 2522
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (161)...(1067)
<223> similar to gi437807 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6294 gacacccaat gacagagaac cgccacccca aagaccaccg tcaagcagga gagcttcgca 60 tttagcccag gaaatcacca gtgctgcttc cctcggggac cagacccaaa tcctggggtc 120 ceteactaca getecagtea ttaccagege cattegeage atgccaggga teageagtea 180 gatectcace aatgetcagg gacaggttat tggaaceett ccatgggtag tgaactcage 240 300 tagtgtggeg geeceageae eageecaaag cetgeaggte eaggeegtga eeceeeaget gttgttgaac gcccagggcc aggtgattgc gaccctggct agcaqcccc tqcctccacc 360 tgtggctgtc cggaaagcca agcacacctg agtccctgct aaagagtgag gtgcagccca 420 tcaagcccac accaaccgtg ccccagcctg ctgtggtcat tgccagccca gctccagccg 480 ccaagccatc tgcctctgct cctatcccaa ttacctgctc agagaccccc accgtcagcc 540 agttggtgtc caagccacat actccaagtc tggatgagga tgggatcaac ttagaagaga 600 teegggagtt tgccaagaac tttaagatee ggeggetete getgggeett acacagacee 660 aggtgggtca ggctctgact gcaacggaag gtccagccta cagccagtca gccatctgcc 720 ggttcgagaa gctagacatc acacccaaga gtgcccagaa gctaaagccg gtgctggaaa 780 agtggctaaa cgaagctgaa ctgcggaacc aggaaggcca gcagaacctg atggagtttg 840 tgggaggega geeetecaag aaaegeaaae geegeacete etteaeeeee caggecatag 900 aggeteteaa tgeetatttt gagaagaace caetgeecae aggeeaggag ateaetgaaa 960 ttgctaagga gctcaactac gaccgtgagg tagtgcgggt ctggttctgc aatcggcgcc 1020 agacgeteaa gaacaccage aagetgaacg tettteagat eeettaggge teageceetg 1080 gccctgtgtt ctagcacttt gtccatttcc cgtggcatcc ggctgcagcc actgccatga 1140 cagcacctgt cattttgcca cgtgcagctg tgctcacccc aggtcatcag actccaccgt 1200 gtgcatgtgc atcaatgtcc ctcttttctc ccacacatct cacatcatgg ggaggccaga 1260 gggggccaca cgagagctcc aggctctggg ctggtcactc cgaaqaaqaq qatttqtqac 1320 gtcacttaga gaagcacctt gctagcatgg tttctgaagg gtgaattctg gtggggaacc 1380 agaaactccc tgtctttggg gcagggctaa agcagctcct aaggaccact ggccattagc 1440 tottgotttt gatggcatte totttecace tigtettete etttgeteet etgtgttagt 1500 gtggcaggta tgacaactca tccagtggaa acacagcctc acactgccct tccgcccccc 1560 acactttgcc tgcaggtgca ccgaaaggac ctgggagata aaattcaaaa aaqtqtqatq 1620 tgctgctcag aaggtcagac tccatgtctg ccttgacctc aaggtcagaa qqttcccaaa 1680 cccctggggc tggaacatgg gatctcctct tccacctctt cctggttcct ttgcggggaa 1740 aattgccact aaaacagaac cttttcttaa tcccatgttg gaaggaagca acagtgaact 1800 ctacctgttc tggagttctc ctgggtctgc agaaggttgg gaatttagaa aataaggctg 1860 ttctttcata ttttaattta atctctgtca atggccatcc ctcccacaaa aaaacgtggg 1920 ttaagagaac ttgcagactg gatatgcaag caaacgggca actctggaga aaaataagga 1980 aaggaatget gactttetet ttetttetet tgteeccaca eccattecca acceaataet 2040 ggggccttct caaaaggagc aaattaaaca ataaaccaga cacgcaaggc cctgggggaa 2100 aggacaacat cctgaaataa atgatggagc ccaggaaggt ctcttgtqqa aqttqactta 2160 actictaatit tottigtaac titaagoott ggatacggga qqaqaaatot cattitiqtoq 2220 agtctcagac catgtctgtg tgtaagcaat ccccacagtg tcctctgagc caaggacacc 2280 cccagatcag attgagtttt gcttctagac ggggtagcta tggtaccttg qqqqttaqct 2340 ctcatccaag ctgttaagtg agtttccagc ctcactgtgg ctggaaaqcc cctaaaattc 2400 agtatgtaac tccaggaagt caggagagaa ctgagatttg cctagatgac cacaggcttg 2460 cggtcgaaat tatccctaaa gggccccaag tcacgtgggg tatcccaccc tgtctttcaa 2520 tc 2522

```
<211> 1474
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (188)...(848)
     <223> similar to gi4929673 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6295
teegeggaeg egtgggeege gatggeegaa eetgegtetg tegeggetga atetetegeg
                                                                       60
ggcagcaggg cgcgctgc acgcacagta ctaggtcagg tggtgctccc gggtgaggag
                                                                      120
ctgctcctgc cggaacagga ggacgcggaa ggccctgggg gtgcagtgga gcgaccgttg
                                                                      180
agcctgaatg ctagagcgtg ctcgcgggtg cgcgttgtat gcggtccggg ccttcggcgc
                                                                      240
tgtggggacc gcctgctggt caccaagtgc ggccgcctcc gtcacaagga gcccggcagt
                                                                      300
ggcagcggcg gcggtgttta ctgggtggac tctcagcaga agcggtatgt tccagtaaaa
                                                                      360
ggagaccatg tgattggcat agtgacagct aaatctggag atatattcaa agttgatgtt
                                                                      420
ggagggagtg agccagcttc tttgtcttac ttgtcatttg aaggtgcaac taaaagaaac
                                                                      480
agaccaaatg tgcaggttgg agatctcatc tatggccaat ttgtqqttqc taataaaqac
                                                                      540
atggaaccag agatggtctg tattgacagc tgtggacgag ccaatggaat gggtqtcatt
                                                                      600
ggacaggatg gtctgctttt taaagtgact ctgggcttaa ttagaaagct attagctcca
                                                                      660
gattgtgaaa tcatacagga agtgggaaaa ctctatccac tggagatagt atttgqaatg
                                                                      720
aatggaagaa tatgggttaa ggcaaaaacc atccagcaga ctttaatttt ggcaaacatt
                                                                      780
ttagaagett gtgaacacat gacgtcagat caaagaaaac agatettete cagattggca
                                                                      840
gaaagttgat ataggtggac ttttttacag gtcagttgag gcaaaaaact atgggttttt
                                                                      900
tcaggtgaac ctcccccatt taaatactca gaagataagg tgtgaatgta tgtattatta
                                                                      960
gagtccgaaa gtatttttat aagttactgg ttttcaccca cgcttttgtg ggagagaaaa
                                                                     1020
tcattgcaaa atcatttttt ttgttcggta caataaagtt tactaaaaaa cagtattagg
                                                                     1080
gtttatttgg agttaactcc cttagtaatt gctacagctt ccataattaa ctggaggtca
                                                                     1140
gcagtaaaat aattttgtga ttataacagt aagccaggtt caccagagga aatgtggaat
                                                                     1200
acctaagtat aaagcagcaa agaaatgtca cctgtagtcc cattattcag cgqqqtqata
                                                                     1260
etttgagace atgtaaatag ceggtteete cacaacettt ettteaactg agteaacaat
                                                                     1320
tgtattagga gtgacaaaat gatgattttc taattctatt atgcattcct tattagctgc
                                                                     1380
attettetgt aagtageeee tgetegtatt ttagatgate aetatggagt catggaacae
                                                                     1440
taatattttt taaataaatt caattaaatt aacc
                                                                     1474
     <210> 6296
     <211> 2121
     <212> DNA
     <213> Homo sapiens
```

<210> 6295

<220>

<221> misc_feature

```
<400> 6296
cattacccca agcttggcac gaggatcgtg gcagccgcct cggccgccgc aatgcagaga
                                                                     60
gaggagaagc agcttgaggc atcattagat gcactgctga gtcaagtggc tgatctgaag
                                                                    120
aactctctgg ggagtttcat ttgcaagttg gagaacgagt atggccggct gacctggcca
                                                                    180
tetgteetgg acagetttge ettgetttet ggacagetga acaetetgaa caaggtettg
                                                                    240
aagcatgaaa aaacaccgct gttccgtaac caggtcatca ttcctctggt gttgtctcca
                                                                    300
gaccgagatg aagatctcat gcggcagact gaaggacggg tgcctgtttt cagccatgag
                                                                    360
gtagtccctg accatctgag aaccaagcct gaccctgaag tggaagaaca ggagaagcaa
                                                                    420
ctgacgacag atgctgcccg cattggtgca gatgcagccc agaagcagat ccagagcttg
                                                                    480
aataaaatgt gttcaaacct tctggagaaa atcagcaaag aggagcgaga atcagagagt
                                                                    540
ggaggtetee ggeegaacaa geagaeettt aaceetacag acaetaatge ettggtggea
                                                                    600
gctgttgcct ttgggaaagg actatctaat tggagacctt caggcagcag tggtcctggc
                                                                    660
caggcaggcc agccaggagc tgggacgatc cttgcaggaa cctcaggatt acagcaggtg
                                                                    720
cagatggcag gagctccaag ccagcagcag ccaatgctca gtggggtaca aatggctcag
                                                                    780
gcaggtcaac cagggaaaat gccaagtgga ataaaaacca acatcaagtc ggcttccatg
                                                                    840
catecetace ageggtgagt gtggctggca acetegacte cetggtgete tttgcagagt
                                                                    900
tgggcagtga aattaccttt tgctcaaggc tcacctagat gggtacaata aaaagaacat
                                                                    960
gggctttcag cagcagacaa atcccacttc caccactgac tagctgtgtg accttggaca
                                                                   1020
agtgacctaa tttttctgag cctgtttctc atttgtaaat ggtgataata cctacctcat
                                                                   1080
agggttgttg tgaggatcaa aatgaggaaa tgaatgtaaa gcacttagta cagtatatga
                                                                   1140
aataatgggt attcaataaa tgatagtttc tacagatcct tctccccacc accctccaca
                                                                   1200
gtccttgatc cagaacttac cctaatctga tactgcctca cgtcaatggt gagctgatgg
                                                                   1260
acacaagatc aaataaggct atgcttattt tgtgctgcca gaaactgtag caacctctgt
                                                                   1320
gttcttagag gcacactgtt tttgcaggcc ctcctgcctg ggtttcattc tggctatccc
                                                                   1380
tctaaggcgc aaggtgaaga agcttctggg ccaggaagga aaaaaaaatg cccacctgca
                                                                   1440
gctctggtga agcttgggcc tgctctcctt tccatcctct aaggagccaa cttggctttt
                                                                   1500
acctgtcaaa tagtcataaa gtcccctatc ctttacccca ccttatacac acgaggcttt
                                                                   1560
ctcaggaagt ggctctgcca ggcaggacta tgtgggaaag ggtttttcct tagcacacga
                                                                   1620
aaaagcccct tcccctggat tcatgtttct tattttggag ggagaaggga attgcacttc
                                                                   1680
acactgccat cagggtttag ttgacctcat aatggtgccc actttctcga ctttggccag
                                                                   1740
gatttccttc aaagaaaacg actttccttc atttccctaa gcctgtggcc caaatggtgg
                                                                   1800
accagaatga tggtgggagg gggcaacccc cagtagcttt gcctgctttt ataaagttga
                                                                   1860
acaaattgaa tttagacatt caggctaacc tgcctttctt agtactcctt tgttggcatg
                                                                   1920
ggcaggggtt gagtcagcag aagtggacca aaggattcct ctgaataaag ttatttaaaa
                                                                   1980
taaaaaaaaa aaaaaggggc ggccgtttta aaggatccaa ttttacttcc ccgggcttgc
                                                                   2040
2100
gtcgggacgg gaaaaaccct g
                                                                   2121
```

```
<210> 6297
<211> 2960
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(2961)
```

```
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (396)...(2069)
<223> similar to gi4469250 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6297
ccgaggttcc tcatctgctc gcgaggatgc cttttctctt ctgccttgcg aaataacagc
                                                                     60
agcctagctg tttgcccgtg accagtgaga aaggcagcgt cgcgagctga ttaggtttca
                                                                     120
cccaaaggtc gcggcgcga attggtttct aacgagaact tttaaaaatga tccgttccaa
                                                                     180
aaaagggtag gagccgcgag accctccaac tgcccagaga aaacaagtct cgtctgggca
                                                                     240
aagttetegg cecaegeggt cegggeeaag ggeaageggt ceetgegeee caegttgeeg
                                                                    300
cagcactgcg cgtgcgaagc cgctgntcaa acgcgctgac ggaggccgag aagagaaaaa
                                                                    360
ggcgggactt caaattcccg ggttgagcaa aatgggcgcg ggagaaggag atgcaggagt
                                                                     420
ttcaccegta gettetttee gaggeegeee ggaeeteage aegettaege attecategt
                                                                     480
gcggcggagg tacttagete actcgggccg cagccacetg gagcccgagg agaagcagge
                                                                     540
actgaagcgg ctggtggagg aggagccgct gaagatgcag gtggatgaag ccgcttccag
                                                                    600
ggaagacaaa ctggacctta ccaagaaggg caagaggcct cccacccctt gtagcgaccc
                                                                    660
ggagagaaaa aggttccgct tcaattcaga gtcggagtcc ggctctgaag cctccagccc
                                                                    720
agactacttt ggacccccag caaagaatgg ggtggcaagc agaagtcaca cccacccaa
                                                                    780
agaggagaat ccaaggcgag ccctcaaagg cagttgagga gagcagtgat gaggaacggc
                                                                    840
agagggacct gcccgcacag aggggagagg agagcagtga ggaggaggaa aaggggtaca
                                                                    900
aggggaagac taggaagaaa cctgtggtaa agaagcaggc accaggcaag gcctcagtca
                                                                    960
gtaggaagca ggccagggaa gaaagtgagg agagcgaggc agaacccgtt cagaggacag
                                                                   1020
caaagaaggt ggagggaaat aaaggaacta aaagcctgaa ggaaagtgaa caggagagtg
                                                                   1080
aagaggagat cctagcccag aagaaagagc agagagagga ggaagtggag gaggaagaga
                                                                   1140
aagaagagga tgaggaaaag ggggattgga aacccagaac caggagcaat ggccggagaa
                                                                   1200
agtcagctag ggaggagagg agctgtaagc agaaaagcca ggcaaagagg ctcttgggag
                                                                   1260
actcagacag cgaggaagag cagaaagagg cagccagcag tggggatgac agtgggagag
                                                                   1320
1380
ggttgagtgg aagcagcgag gacgaggaag acagtgggaa gggggaaccc acagctaaag
                                                                   1440
gctctagaaa gatggccaga ctgggcagca ccagtggtga ggaaagtgac ttggagaggg
                                                                   1500
aggtaagtga cagcgaggca gggggaggcc cccaggggga gaggaagaac cgctcttcca
                                                                   1560
agaagagete caggaaagge aggacacgaa geteetette eteeteagat ggaagtecag
                                                                   1620
aggccaaagg agggaagget ggctcaggtc gccgtggaga ggaccacccg gctgtgatga
                                                                   1680
ggctgaagcg ctacattcgg gcctgtggtg cccatcgaaa ctacaagaag ctgttgggct
                                                                   1740
cctgttgctc acacaaggag cgcctgagta tcctccgggc agaactggaa gcgctaggca
                                                                   1800
tgaagggtac cccttcccta gggaagtgtc gggccctgaa ggagcagagg gaggaggcag
                                                                   1860
ctgaggtggc ctccttggat gttgcgaaca tcatcagtgg ctcgggccgg ccacgcagac
                                                                   1920
gtacagectg gaaccettta ggagaageag caceeceagg ggagetgtae egaeggaeee
                                                                   1980
tggactcaga tgaagagcgg ccccgtcccg cacccccaga ctggtcacat atgcgtggca
                                                                   2040
tcatcagcag tgatggcgag agtaactgag ctctgccacc cccaggaggg acccttgata
                                                                   2100
catgtacaaa gcatacatag caccccttgc cctgtgtctg tggaacagaa gcagcttcct
                                                                   2160
tcagagaaga ctgcagctcc caaggacaca agctgttggg atgctacttc tcagcttcac
                                                                   2220
gctgtccctt taaggtgttt attttttaag actcaataaa ggagtgtttt taatcacctc
                                                                   2280
atcaaatttg gtcccccatt ctcacctcct gtattttggg ccaggaaact gagcagtagt
                                                                   2340
cactgeetee aceteeteee etggeetggt teeetttaat tteeceeggg tteetggaag
                                                                   2400
aagtccctgc ctccagaccc tgtcatccaa cagccaccag acccttttgg agaagggtgt
                                                                   2460
gtggctcctg tgctgcccgc ctaccccgtg gcccctctgc ttttagccta gtctgataac
                                                                   2520
ctaatgccca cttgggagag ggatagaatg acttgagggc agccagtgct taagccttct
                                                                   2580
cccttatgca aacagccact ttgtccatgg gctgttagcc tcaaaggggt ggggaaaagc
                                                                   2640
ccatacetee tgggccagte ctagecetee taggeetetg getacaggee cageetetge
                                                                   2700
```

```
agtcacatga ggtctccact gaactctggc tgctgaggct tgcggggaaaa ttccgtgacc 2760 catggagct cctggggtct gtgtgggagg caaacctaag aatctttgaa gtcaaagcaa 2820 agaaaacagg aattagaggt caaggggttg aagaccacct ttgagatccg agatctggtc 2940 tataaaacac aagcagtaaa 2960
```

```
<210> 6298
<211> 5275
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (830)...(2439)
<223> similar to gi5911982 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6298 ttttttttt tttttttta tctggagact gagttttgca ctcgttgccc aggctggagt 60 gcaatggtgc gatctcagct cactgcagtc tccacctcag caggagagca ggaatcttca 120 gtgatccacg ggcaaatatg cagccattgt gggcacctgt tcctcccgcg acctttgtgc 180 ccacgtetet ecetecagta ectactgeac ggeececcae gteegeetee tgeeattgee 240 agcaggtgcc ttgcgccggt acctggctgt gcttattcat ccattatggt cgctctgtca 300 ctggtgccat tatgtgctca catgcccact ccctcaggtt tagaagtcgt gttgcccggc 360 aacagaacaa tctgctggct tagcctttgg ccaagttggc agctggacga ggacgctcag 420 ageccagete ttgagagtte aagtateega cagtteecca etgeteecag gageggttae 480 ccgggcactc tgtgcccctc attcctgttt gggccaaggc cgaggacctg cgagtagggc 540 tcagttgcct ggagcccctt cagcccatcc cccagttcac tttgcttgtg ggatctcccc 600 gttgctcctg cccctggact gagtggcagg ccatcctaca aacacccgca cactcgacat 660 cagtggtgtc aagacaactc taagaaggtt ttccgtgatc ctgcaagacc tgtgttccat 720 cctggtgatt ctgtcttcaa tttcactgca caggtaccac agtaagccag tgctgtgtgc 780 tecgagttee agggeateee ecageteage cactacactg ageacaagga etetgtgggg 840 cccaggagca ggtagtcacc cctttggggt ccacaacacc cggctgtccc cagacttgtg 900 tccagggaag atagtgttga gggccctcaa ggagagcggg gcagggatgc ctgagcagga 960 caaggacccc agagtccaag aaaatcctga tgatcagaga acggtccccg aggtcaccgg 1020 ggatgcacgg tctgcatttt ggcccctgcg ggacaatgga ggcctctctc cctttgtgcc 1080 caggeceggg cetetgeaga cagaceteca tgeceagage teagaaatea gatataacea 1140 gacateccag acatectgga egagetegag caccaaacga aatgetatet ecageteeta 1200 cagetecaeg ggaggettge eggggetaaa geagaggagg ggaecageet eateeegetg 1260 ccagctgacc ctcagttact caaagacagt gagtgaggac aggcctcagg ctgtctcttc 1320 gggtcacaca cggtgtgaaa aggcggcaga tacagcacca gggcagacac tcgccccag 1380 gggtggctcc cccagatccc aggcctctag gccccgtaga cgcaagattc ccctgctgcc 1440 aagcaggcga ggggagcctt tgatgcttgc cacctccctt agagctgggg taccgggtca 1500 cggctgaaga cctgcacctg gaaaaacagg cggcatttcc agcgcatcaa cagtgcactg 1560 cacgttgagg acaaggccat ctcggactgc agaccctcac ggccttccca cactttgtcc 1620 tcacttgcaa caggggcttc tggtctgcct gccgtttcta aagcacccag tatggatgta 1680 cacgcaggag acacacaagt cccaagactg cctgggccta ctggccccct tagcatctgc 1740 tgcaggggtc ccctctacag ctcccatgtc tgggaagaag cacagaccac caggcccct 1800 gttctcctcc tcagatcccc ttcctgccac ctcttcccat tcccaggact cagcccaggt 1860 cacctcgctg attcctgccc ccttcccagc tgcaagcatg gatgcgggca tgagaagaac 1920

```
aaggtgtggc acttctgctc ctgcagctgc cgcagcagcc cctccccct ccacattgaa
                                                                    1980
ccccacgttg gggtcactac tcaatgcagt ggatgaaggc ccctcacatt tctgggccct
                                                                    2040
cagecacage tgeageaggt geceagaggt cagaaceaga gateceagae eteceggaee
                                                                    2100
agetegtgee ecaaaatgaa atgeeatete gageeeetae agetetaegg gaggeeteee
                                                                    2160
ggaacaaaag cggagaaggg ggccagcctc atcccactgc cagctgaccc tcagttcctc
                                                                    2220
aaacacagac ccagggtgca tgcccatctc cagcccaggg cagctcccct gtaagctggg
                                                                    2280
tgagctactg aagccaaggt gggaggcagc tgacaacacc acccacggcc catgcagagg
                                                                    2340
tggtagaaag gctggactca gcaggaacac caaatcccgg accaggcaga aaccacccaa
                                                                    2400
gactgagggg ctcgtgccag agcggtggcc acagggctga atggtcgctg agacagagat
                                                                    2460
ggaagccagg acaagggagc ccaccgggcc cagatagaga cttcagaacc cactcctgag
                                                                    2520
aacagcggag ccaggcgctt agaggaagac caaatgctgc caggacacgg attgtccagg
                                                                    2580
gattacattc cagcatctta ttagaggacg gaagcagagg gtgctgtttc aacgccacca
                                                                    2640
ccaggagaga ggcagagggg ctgtgccgtg ctagagtcct cagggaggga gtgacctcga
                                                                    2700
ccctggctgt gctgcaagct gactccagcc ttgggctcag cagcacccgg tgaacagcag
                                                                    2760
caggaggage egetagagea getgeteatg ggeagageag ecettgggea acteetgeea
                                                                    2820
ccacccctc cccagggagc ccaaggcagg ggaggctcag catggaatga aacaggggag
                                                                    2880
tgagggacac aaggaggtgg gaagtgggag ggtcccagcc ccaccaagta cgcagagacc
                                                                    2940
ccctcgtcgt cctggacacc acaggggcac ctgcaggctg ggagaccagg tcctctgtgc
                                                                    3000
atgggcccgg gaggcagacc tgccccaagg gtgatgcaga ggccacaggt gctgcacgct
                                                                    3060
ccaagegeee actetagaea teageeteea ggttgaetaa gggteaggte atgtttgaaa
                                                                    3120
ccaatgettg getggacegg gacecatgge aagageacet ggggeaceag tgtttagece
                                                                    3180
tggtctgcag gaaggaggac agcagacttt aggaccccac agcacggcag tgcttgacca
                                                                    3240
tttcacccac tttgggcttc cttgagaaat atggatgggg acccctctgg ggatgggcaa
                                                                    3300
ggccttccag gataggctca gttttggtcc cctgcttttt gaggttgggt taaaattccg
                                                                    3360
accatggcag aggaagcaca gctcaggttc ccacacctca cttttcacag cctctgaggg
                                                                    3420
cagcagtgca cgtggaggag acgtctccca tgaggccaag gcctccagtg ctcaccgatg
                                                                    3480
ccctctgcga agttggggta gaactcgtca gtgaagaggg gctcgggcag ctcacggaaa
                                                                    3540
tacagettea gegtgeetge gatggegtte aegteeatet egeteateat caetgacaeg
                                                                    3600
teettgttat etggaaagag caeggaaatg cageggeete ettgaagate etgataaatg
                                                                    3660
aagaaaagac acagagaagg atgtgacatg cctgggccat ggagcactct tgagatctca
                                                                    3720
tegtggacae caetgeecae acetecatee egteetgege aggeegacae teaettgaae
                                                                    3780
gttgaagget geetteagtg eetggatgte tgeggeeaca eeggeeggae aegtggtaga
                                                                    3840
tgcccacctc ctccatgcct cggcgctcga tctcctccac gcactggcgc acgatgtagg
                                                                    3900
gcaccttgga cctctctct ctgtgggagg ggggaatgtt ctcagtgtcc taacagccct
                                                                    3960
gettgggeca taacacagga gacetgetee etatetgege acceggaggt ggggtgagga
                                                                    4020
cggtgacgaa ggtacccagg tctggggctg cacacagagc cttctgcatg cctgtcctcc
                                                                    4080
ctctgcaagc tctgtcttca cggcatgtgc tttctcagga acctttcaag cggccagaac
                                                                    4140
ccctgcgaat cacacatgac ctttgcggga aggtcaggag gcctgtctaa gtcaagtcag
                                                                    4200
cacgggaagg gcatctgaca gattccaggc ctggggttag cagcctgtgc ccccggctgg
                                                                    4260
gagatcagac ccggtgttgg tcctgccacc cacgtgctgt gtgagaggag aatccctgac
                                                                    4320
ccctgccctg ggccttaaca cacatccgac gaatgaatga agggttgcct cagcaccggt
                                                                    4380
gctccaagtc ctgcgatgct aagtgctttt ctcctctgag tcttagcaat ggacaattcc
                                                                    4440
aataceteca cacaggacae tagagtaaga aacetteaca gttagaaege agtgetgtge
                                                                    4500
gggaggcctt aacttgagtt ctgttttgca cctggattta ccagcacatc aaagctgctt
                                                                    4560
cgcaagcccc ctcatcagca gggcttatgt gggggagctg ctgatggagt cctcgctgct
                                                                    4620
4680
gcgtggtgtt taagacacag ataggagtcc agggtatgac tgatggaggc cccggcccac
                                                                    4740
gtgaccagca aggtcagagg cccagccaga ttccatcctg gggaagcaaa tgaattctca
                                                                    4800
gaggaagtgg tetgtgtetg catgaactge teteaaacca acaaatagge ttttetttgg
                                                                    4860
caactgactc gtgacaaagg gtttaagaat gtttgaaaaa aaaaaaaggt gggggggaa
                                                                    4920
cagggaggca gtaggtcctg gaaaagtaaa ttctttattt tacaataaga aagtgattac
                                                                    4980
atattttatt ttttttata atggtggaaa attagaagtg attgtgaaaa tgatgtctac
                                                                    5040
ccgccttgct gatgagtagg atgtgatttg gctctttagg aaactgaatt tgcagaactg
                                                                    5100
aagaatattg atttataaag ggcatggcca ttgacccagt ccatcttatg caaatctgga
                                                                    5160
tgccataaat aatatttaaa aatgaaagta ttggggtgga ggttgcagtg agcagagatt
                                                                    5220
gcccccgcta cactccagcc tggtcgacag agtgaactct gtctcaaaaa aaaaa
                                                                   5275
```

```
<210> 6299
<211> 3010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (302)...(2180)
<223> similar to gi4468288 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6299 geggttgtge egeatetaga gagtegggga geegeeeeeg cacceaggee ttetegeget 60 gcctggtcgc tggtgaagcc cgcggcgcgc gcctctcccg gaccctgcag ggtaaaagaa 120 tgtcacatgt cagcatttgt acctgaagtc agcatgcaaa gttcagggta catggatgaa 180 tgccaacttt tgcatttccc atgtgtatcc tgtgaccatt ctatctggga acatccttca 240 aagagttcat gcatcttact gaggacacct gaccttttga agcttcataa ttcacatcta 300 gatgtcaccg gtctttccca tgttaacagt tctgaccatg ttttattata tatgccttcg 360 gegeegagee aggaeageta caagaggaga aatgatgaac acceatagag etatagaate 420 aaacagccag acttcccctc tcaatgcaga ggtagtccag tatgccaaag aagtagtgga 480 tttcagttcc cattatggaa gtgagaatag tatgtcctat actatgtgga atttggctgg 540 tgtaccaaat gtattcccaa gttctggtga ctttactcag acagctgtgt ttcgaactta 600 tgggacatgg tgggatcagt gtcctagtgc ttccttgcca ttcaagagga cgccacctaa 660 ttttcagagc caggactatg tggaacttac ttttgaacaa caggtgtatc ctacagctgt 720 acatgiticta gaaacctatic atcccggage agicattaga attctcgctt gitctgcaaa 780 tecttattee ecaaateeac cagetgaagt aagatgggag attetttggt cagagagace 840 tacgaaggtg aatgetteec aagetegeea gtttaaacet tgtattaage agataaattt 900 ccccacaaat cttatacgac tggaagtaaa tagttctctt ctggaatatt acactgaatt 960 agatgcagtt gtgctacatg gtgtgaagga caagccagtg ctttctctca agacttcact 1020 tattgacatg gaatgatata ggaagatgat gcctatggcc gaaaagggat gggttgtggg 1080 aatgggacag teettaacaa aaagtttage agtggetgte eeteggggaa gggecaaata 1140 atgggtattt tgataaacta ccttatgagc ttattcagct gattctgaat catcttacac 1200 taccagacct gtgtagatta gcacagactt gcaaactact gagccagcat tgctgtgatc 1260 ctctgcaata catccacctc aatctgcaac catactgggc aaaactagat gacacttctc 1320 tggaatttet acagtetege tgeactettg tecagtgget taatttatet tggaetggea 1380 atagaggett catctetgtt geaggattta geaggtttet ggaaggtttt gtgggtteeg 1440 aatttagtac gccttgaatt gtcttgcagc cactttctta acgaaacttg cttagaagtt 1500 atttctgaga tgtgtccaaa tctacaggcc ttaaatctct cctcctgtga taagctacca 1560 cctcaagctt tcaaccacat tgccaagtta tgcagcctta aacgacttgt tctctatcga 1620 acaaaagtag agcaaacagc actgctcagc attttgaact tctgttcaga gcttcagcac 1680 ctcagtttag gcagttgtgt catgattgaa gactatgatg tgatagctag catgatagga 1740 gccaagtgta aaaaactccg gaccctggat ctgtggagat gtaagaatat tactgagaat 1800 ggaatagcag aactggcttc tgggtgtcca ctactggagg agcttgacct tggctggtgc 1860 ccaactctgc agagcagcac cgggtgcttc accagactgg cacaccagct cccaaacttg 1920 caaaaactct ttcttacagc taatagatct gtgtgtgaca cagacattga tgaattggca 1980 tgtaattgta ccaggttaca gcagctggac atattaggaa caagaatggt aagtccggca 2040 tccttaagaa aactcctgga atcttgtaaa gatctttctt tacttgatgt gtccttctgt 2100 tcgcagattg ataacagagc tgtgctagaa ctgaatgcaa gctttccaaa agtgttcata 2160 aaaaagagct ttactcagtg acttaatata tgttctgtat taaaattaat gtgctttgtt 2220 ggggtttaat tttgggattg gttttgggtt ttgtttttag ttgttttaat ggtaagaatt 2280

```
aagacatttg tagattttaa agaaaaatat gaaattgtcc attaaatcaa gtaaaaatgt
                                                                    2340
gcacaaatgt tttcataaaa tactgcaagc acttctcttc aagaatatga gtggatatta
                                                                    2400
tttttacctt atgttaatca gtgatatgct ttagtcaata atatgattga taaaagaata
                                                                    2460
acatggaatc atgctaactt attttcaaag gaacactgag caataaagta tcgtgggcat
                                                                    2520
ttatgcaaaa aaaaaagtta atttttaca ccttcatgta aggatgtcct tatttaagcc
                                                                    2580
ctgtgacctg gccaagtgtt ttgtttggta tgtacaaaat ggtcagagct aagttgggag
                                                                    2640
aatgagacat getttteeea getgtttggt tatttetetg gattaaetgt teaaetggaa
                                                                    2700
aatttttagt ttttctagec aggtgtggtg gcacacactt gtggtcctag cgacacggga
                                                                    2760
ggtggaggcg gggggattac ttgggatggg attttgagac tctagtgtac ttatgattgc
                                                                    2820
acctgtgage cecectgea eteccaacet gggeaatata gegagteeet ttetettaaa
                                                                    2880
aaaaattgta gtgtttccac ttttcttctg atatttttgt ctatttcact actggataat
                                                                    2940
gccaatataa aaatttgggt ataatcaaga ataagaggta aactactaaa taaaaaaagc
                                                                    3000
tttccaactg
                                                                    3010
```

```
<210> 6300
<211> 7728
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (266)...(6202)
<223> similar to gi641958 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6300
ctcgacgatt tcgttaacgt cttcccttgg agatgggcgc gcaaaccaac cagtgggtct
                                                                       60
gggggcggcg gtgatgggcg tggagctggc ccaatgaggg taggggtggg tggggcagcc
                                                                      120
ccgagcagca gtgctaaagg agcccggcgg aggcagcggt gggtttggga ctgaggcgct
                                                                      180
ggatctgtgg tcgcggctgg ggacgtgcgc ccgcgccacc atcttcggct gaagaggcaa
                                                                      240
ttgcttttgg atcgttccat ttacaatggc gcagagaact ggactcgagg atccagagag
                                                                      300
gtatctcttt gtggacaggg ctgtcatcta caaccctgcc actcaagctg attggacagc
                                                                      360
taaaaagcta gtgtggattc catcagaacg ccatggtttt gaggcagcta gtatcaaaga
                                                                      420
agaacgggga gatgaagtta tggtggagtt ggcagagaat ggaaagaaag caatggtcaa
                                                                      480
caaagatgat attcagaaga tgaacccacc taagttttcc aaggtggagg atatggcaga
                                                                      540
attgacatgc ttgaatgaag cttccgtttt acataatctg aaggatcgct actattcagg
                                                                      600
actaatctat acttattctg gactcttctg tgtagttata aacccttaca agaatcttcc
                                                                      660
aatttactct gagaatatta ttgaaatgta cagagggaag aagcgtcatg agatgcctcc
                                                                      720
acacatctat gctatatctg aatctgctta cagatgcatg cttcaagatc gtgaggacca
                                                                      780
gtcaattctt tgcacgggtg agtcaggtgc tgggaagaca gaaaatacaa agaaagttat
                                                                      840
tcagtacctt gcccatgttg cttcttcaca taaaggaaga aaggaccata atattcctgg
                                                                      900
ggaaccttga acggcagctt ttgcaagcaa atccaattct ggagtcattt ggaaatgcga
                                                                      960
ggactgttca aaatgataac tcatctcgtt ttggcaaatt tattcggatc aactttgatg
                                                                     1020
taactggcta tatcgttggg gccaacattg aaacatacct tctggaaaag tctcgtgctg
                                                                     1080
ttcgtcaagc aaaagatgaa cgtacttttc atatctttta ccagttgtta tctgggagca
                                                                     1140
ggagaacacc taaagtctga tttgcttctt gaagggttta ataactacag gtttctctcc
                                                                     1200
aatggctata ttcctattcc gggacagcca agacaaaggt aatttccggg gggaccctgg
                                                                     1260
ggaggcaatg cacataatgg gcttctccca tgaagagatt ctgtcaatgc ttaaagtagt
                                                                     1320
atcttcagtg ctacagtttg gaaatatttc tttcaaaaag gagagaaata ctgatcaagc
                                                                     1380
ttccatgcca gaaaatacag ttgcgcagaa gctctgccat cttcttggga tgaatgtgat
                                                                     1440
```

```
ggagtttact cgggccatcc tgactccccg gatcaaggtc ggccgagact atgtgcaaaa
                                                                   1500
agcccagacc aaagaacagg cagattttgc agtagaagca ttggcaaaag ctacctatga
                                                                   1560
gcggctcttt cgctggctcg ttcatcgcat caataaagct ctggatagga ccaaacgtca
                                                                   1620
gggagcatct ttcattggaa tcctggatat tgctggattt gaaatttttg agctgaactc
                                                                   1680
ctttgaacaa ctttgcatca actacaccaa tgagaagctg cagcagctgt tcaaccacac
                                                                   1740
catgtttatc ctagaacaag aggaatacca gcgcgaaggc atcgagtgga acttcatcga
                                                                   1800
tttcgggctg gatctgcagc catgcatcga cctaatagag agacctgcga accctcctgg
                                                                   1860
tgtactggcc cttttggatg aagaatgctg gttccctaaa gccacagata aaacctttgt
                                                                   1920
tgaaaaactg gttcaagagc aaggttccca ctccaagttt cagaaacctc gacaattaaa
                                                                   1980
agacaaagct gatttttgca ttatacatta tgcagggaag gtggactata aggcagatga
                                                                   2040
gtggctgatg aagaatatgg acccectgaa tgacaacgtg gecaceettt tgcaceagte
                                                                   2100
atcagacaga tttgtggcag agctttggaa agatgtggac cgtatcgtgg gtctggatca
                                                                   2160
agtcactggt atgactgaga cagcttttgg ctccgcatat aaaaccaaga agggcatgtt
                                                                   2220
tcgtaccgtt gggcaactct acaaagaatc tctcaccaag ctgatggcaa ctctccgaaa
                                                                   2280
caccaaccct aactttgttc gttgtatcat tccaaatcac gagaagaggg ctggaaaatt
                                                                   2340
ggatccacac ctagtcctag atcagettcg ctgtaatggt gtcctggaag ggatccgaat
                                                                   2400
ctgtcgccag ggcttcccta accgaatagt tttccaggaa ttcagacaga gatatgagat
                                                                   2460
cctaactcca aatgctattc ctaaaggttt tatggatggt aaacaggcct gtgaacgaat
                                                                   2520
gatccgggct ttagaattgg acccaaactt gtacagaatt ggacagagca agatattttt
                                                                   2580
cagagctgga gttctggcac acttagagga agaaagagat ttaaaaaatca ccgatatcat
                                                                   2640
tatcttcttc caggecgttt gcagaggtta cetggecaga aaggeetttg ccaagaagca
                                                                   2700
gcagcaacta agtgccttaa aggtcttgca gcggaactgt gccgcgtacc tgaaattacg
                                                                   2760
gcactggcag tggtggcgag tcttcacaaa ggtgaagccg cttctacaag tgactcgcca
                                                                   2820
ggaggaagaa cttcaggcca aagatgaaga gctgttgaag gtgaaggaga agcagacaaa
                                                                   2880
ggtggaagga gagctggagg agatggagcg gaagcaccag cagcttttag aagagaagaa
                                                                   2940
tatccttgca gaacaactac aagcagagac tgagctcttt gctgaagcag aagagatgag
                                                                   3000
ggcaagactt gctgctaaaa agcaggaatt agaagagatt ctacatgact tggagtctag
                                                                   3060
3120
acatatteag gacetggaag aacagetaga egaggaggaa ggggetegge aaaagetgea
                                                                   3180
gctggaaaag gtgacagcag aggccaagat caagaagatg gaagaggaga ttctgcttct
                                                                   3240
cgaggaccaa aattccaagt tcatcaaaga aaagaaactc atggaagatc gcattgctga
                                                                   3300
gtgttcctct cagctggctg aagaggaaga aaaggcgaaa aacttggcca aaatcaggaa
                                                                   3360
taagcaagaa gtgatgatct cagatttaga agaacgctta aagaaggaag aaaagactcg
                                                                   3420
tcaggaactg gaaaaggcca aaagaaaact cgacggggag acgaccgacc tgcaggacca
                                                                   3480
gatcgcagag ctgcaggcgc agattgatga gctcaagctg cagctggcca agaaggagga
                                                                   3540
ggagctgcag ggcgcactgg ccagaggtga tgatgaaaca ctccataaga acaatgccct
                                                                   3600
taaagttgtg cgagagctac aagcccaaat tgctgaactt caggaagact ttgaatccga
                                                                   3660
gaaggettea eggaacaagg eegaaaagea gaaaagggae ttgagtgagg aactggaage
                                                                   3720
tetgaaaaca gagetggagg acacgetgga caccacggca geecageagg aactacgtae
                                                                   3780
aaaacgtgaa caagaagtgg cagagctgaa gaaagctctt gaggaggaaa ctaagaacca
                                                                   3840
tgaagctcaa atccaggaca tgagacaaag acacgcaaca gccctggagg agctctcaga
                                                                   3900
gcagctggaa caggccaagc ggttcaaagc aaatctagag aagaacaagc agggcctgga
                                                                   3960
gacagataac aaggagctgg cgtgtgaggt gaaggtcctg cagcaggtca aggctgagtc
                                                                   4020
tgagcacaag aggaagaagc tcgacgcgca ggtccaggag ctccatgcca aggtctctga
                                                                   4080
aggcgacagg ctcagggtgg agctggcgga gaaagcaagt aagctgcaga atgagctaga
                                                                   4140
taatgtctcc acccttctgg aagaagcaga gaagaagggt attaaatttg ctaaggatgc
                                                                   4200
agctagtctt gagtctcaac tacaggatac acaggagctt cttcaggagg agacacgcca
                                                                   4260
gaaactaaac ctgagcagtc ggatccggca gctggaagag gagaagaaca gtcttcagga
                                                                   4320
gcagcaggag gaggaggagg aggccaggaa gaacctggag aagcaagtgc tggccctgca
                                                                   4380
gtcccagttg gctgatacca agaagaaagt agatgacgac ctgggaacaa ttgaaagtct
                                                                  4440
ggaagaagcc aagaagaagc ttctgaagga cgcggaggcc ctgagccagc gcctggagga
                                                                  4500
gaaggcactg gcgtatgaca aactggagaa gaccaagaac cgcctgcagc aggagctgga
                                                                   4560
cgacctcacg gtggacctgg accaccagcg ccaggtcgcc tccaacttgg agaagaagca
                                                                  4620
agaagaagtt tgaccagctg ttagcagaag agaagagcat ctctgctcgc tatgccgaag
                                                                  4680
4740
gggccctcga ggaagccctg gaggccaagg aggagtttga gaggcagaac aagcagctcc
                                                                   4800
gagcagacat ggaagacctc atgagctcca aagatgatgt gggaaaaaac gttcacgaac
                                                                  4860
```

	caaacgggcc					4920
	acgaactcca					4980
caggccatga	aggcgcagtt	cgagagagac	ctgcaaacca	gggatgagca	gaatgaagag	5040
aagaagcggc	tgctgatcaa	acaggtgcgg	gagctcgagg	cggagctgga	ggatgagagg	5100
	cgcttgctgt					5160
gaagcccaaa	tcgaggctgc	gaacaaagct	cgggatgagg	tgattaagca	gctccgcaag	5220
ctccaggctc	agatgaagga	ttaccaacgt	gaattagaag	aagctcgtgc	atccagagat	5280
	ctcaatccaa					5340
cttcaattgc	aggaggaact	tgcctcatct	gagcgagccc	gccgacacgc	cgagcaggag	5400
agagatgagc	tggcggacga	gatcaccaac	agcgcctctg	gcaagtccgc	gctgctggat	5460
	gtctggaagc					5520
agcaacatgg	agctgctcaa	cgaccgcttc	cgcaagacca	ctctacaggt	ggacacactg	5580
aacgccgagc	tagcagccga	gcgcagcgcc	gcccagaaga	gtgacaatgc	acgccagcaa	5640
ctggagcggc	agaacaagga	gctgaaggcc	aagctgcagg	aactcgaggg	tgctgtcaag	5700
	aggccaccat					5760
cttgagcagg	aagccaagga	acgagcagcc	gccaacaaat	tagtccgtcg	cactgagaag	5820
	aaatcttcat					5880
	agaaggccaa					5940
gaagaagaag	cgacgcgtgc	caacgcatct	cggcgtaaac	tccagcggga	actggatgat	6000
gccaccgagg	ccaacgaggg	cctgagccgc	gaggtcagca	ccctgaagaa	ccggctgagg	6060
cggggtggcc	ccatcagctt	ctcttccagc	cgatctggcc	ggcgccagct	gcaccttgaa	6120
ggagcttccc	tggagctctc	cgacgatgac	acagaaagta	agaccagtga	tgtcaacgag	6180
acgcagccac	cccagtcaga	gtaaagttgc	aggaagccag	aggaggcaat	acagtgggac	6240
agttaggaat	gcacccgggg	cctcctgcag	atttcggaaa	ttggcaagct	acgggattcc	6300
ttcctgaaag	atcaactgtg	tcttaaggct	ctccagccta	tgcatactgt	atcctgcttc	6360
aaacttaggt	acaattgctc	ccctttttat	atacagacac	acacaggaca	catatattaa	6420
acagattgtt	tcatcattgc	atctattttc	catatagtca	tcaagagacc	attttataaa	6480
acatggtaag	acccttttta	aaacaaactc	caggcccttg	gttgcgggtc	gctgggttat	6540
tggggcagcg	ccgtggtcgt	cactcagtcg	ctctgcatgc	tctctgtcat	acagacaggt	6600
aacctagttc	tgtgttcacg	tggcccccga	cgactcagcc	acatcaagtc	tcctagacca	6660
ctgtggactc	taaactgcac	ttgtctctct	catttccttc	aaataatgat	caatgctatt	6720
tcagtgagca	aactgtgaaa	ggggctttgg	aaagagtagg	aggggtgggc	tggatcggaa	6780
gcaacaccca	tttggggtta	ccatgtccat	ccccaaggg	gggccctgcc	cctcgagtcg	6840
atggtgtccc	gcatctactc	atgtgaactg	gccttggcga	gggctggtct	gtgcatagaa	6900
gggatagtgg	ccacactgca	gctgaggccc	caggtggcag	ccatggatca	tgtagacttc	6960
cagatggtct	cccgaaccgc	ctggctctgc	cggcgccctc	ctcacgtcag	gagcaagcag	7020
ccgtggaccc	ctaagccgag	ctggtggaag	gcccctcccc	gtcgccagcc	gggccctcat	7080
gctgaccttg	caaattcagc	cgctgctttg	agcccaaaat	gggaatattg	gttttgtgtc	7140
cgaggcttgt	tccaagtttg	tcaatgaggt	ttatggagcc	tccagaacag	atgccatctt	7200
cctgaatgtt	gacatgccag	tgggtgtgac	tccttcattt	ttccttctcc	cttccctttg	7260
ggacagtgtt	acagtgaaac	acttaggcat	cctgtttttg	gttggtagtt	taaggcaaac	7320
tgacatttac	gggaaagttg	ccttaggaca	ctacagtact	aagacaatgt	tgaatatatc	7380
attcgcctct	ataacaattt	aatgtattca	gttttgactg	tgcttcatat	catgtacctc	7440
tctagtcaaa	gtggtattac	agacattcag	tgacaatgaa	tcagtgttaa	ttctaaatcc	7500
ttgatcctct	gcaatgtgct	tgaaaacaca	aaccttttgg	gttaaaagct	ttaacatcta	7560
ttaggaagaa	tttgtcctgt	gggtttggaa	tcttggattt	tcccccttta	tgaactgtac	7620
tggctgttga	ccaccagaca	cctgaccgca	aatatctttt	cttgtattcc	catatttcta	7680
gacaatgatt	tttgtaagac	aataaattta	ttcattatag	ataaaaaa		7728

<210> 6301

<211> 2228

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1973)...(823)
<223> similar to gi624964 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

```
<400> 6301
ttttttttt ttgcatttat aaaaactggc agatttattc tgcaggggcc cattttcaag
                                                                       60
aagctaaagg tgaaggtggg aggggagaag tttcctcccc ttctcctttc tccctcatct
                                                                      120
tatttcctcc aaggggtaaa aaaaatggcc tggaccccaa aacctaccca aataaaaaat
                                                                      180
caaaaaactg aggttccaaa aagttacagc atcttatttc ctcatagaaa aggggaagga
                                                                      240
gccagaggga aggggagtcc ctggggtggg gggatatctc acccccagcc cggtgagaca
                                                                      300
tececteece ttaaataget geeceaaatg gggeaageee agggetatag catttaaaaa
                                                                      360
ctcccacatc ccattttatc aaaaccaaag agaaaaaaa atttcccttt tcccccaaaa
                                                                      420
cccaaatata tatatattt tttttcttaa aaaaaccaaa actttgaagg cattaagcgt
                                                                      480
taaagtgaat ctagaacaag ggaatgtgaa attccctcct tccttccccc ttcctgtggg
                                                                      540
gttcattggt gcatccccag cagagggacc ggccccaagg ggatggcaga ggggaaggac
                                                                      600
caaagggaga aaagggcggg ggcctcccca gccaatcagc agccagtgtg ggtgtgagca
                                                                      660
gggaagccac acccccttgg agttttccaa gtgggatggg gagtgggaac gatgcattcc
                                                                      720
tgtgtagtct tcagccaatt ccaagtcaag tagaggcagg gaaagcaggg tgacaggccg
                                                                      780
ggtgtgcgga aaggagaagc gggtcttctg ggtccctgtg gtcagggaga accccgcttc
                                                                      840
ctcagctcct ggacgaaggc ttcaatgatt tcctctttca ctttctgcaa ttccttcttc
                                                                      900
acctetteca gaageteetg ttteaccete tgtaggteeg agtaateact ggagetggge
                                                                      960
gtgcagggtt gggtctcgga agtggtcacc gaagaagacg acttcatcct tggcaaggtt
                                                                     1020
gtgctgttct tctcccaggg tctccgcaca gattcactct gggccgggac tctggcctct
                                                                     1080
ggctcctcct gattggcaga ttcatccttg ggggttttct ccccaacttg cgtggctttc
                                                                     1140
cttctccggg ccagcatggc gttcatctct tccatgagtc ccccacctcc gcttcqacca
                                                                     1200
ctctcagctt tgggggctgt gggcccccgt gaaggcctcc tcctgcttgc tgactttcct
                                                                     1260
gagtttggct ccagcaatag ctgcggccag gcctggggcc ccagctcccc caccaccaqq
                                                                     1320
gccctgtgct gccgggagag ggggtgcagg gggtggtcct cccctgctc cgtgcgctgc
                                                                     1380
agetgggace ecegaagggg geaaacetgg gggtgggggg ggacetggag gagggggagg
                                                                     1440
tectggtggt gggggtggac ecccageggg gggageaggt gggeeteetg cattggagae
                                                                     1500
coggogotot atgtgotoog acgggcoggg ctgctgcott ttctgctgct ccacctcctc
                                                                     1560
cggggagggg ccgttcggga ccgaccaggt gggaagtgct gggggtggag ggggccacc
                                                                     1620
tecettecaa egeetetagg geaetggeea tgeeggegge aaactgggee geatecteet
                                                                     1680
tgctgccgaa gttgaggccc cagacctggg cgagcgtcgc gccactgatg ggaagttggg
                                                                     1740
ggtggcctgg ttatacttga caccccggac gatggcacag ttgatgacca cctgctggtc
                                                                     1800
gggctgcatc ttccggccca cgacgcgaaa ggaattggcc gtggggttgt ggtagatctg
                                                                     1860
gacgcggctg aaggcctggg gacccgtgcc agcagggagc catcgcttgt tgccatcatc
                                                                     1920
ataaagcatc acagtggccc ggctggaaca gatgaccgtc tcgctcatgg ctgctcggcg
                                                                     1980
ggcggcatgc gtcgcccacg ggctggctgc tcccggggcg cccctggctg gaggttcagg
                                                                     2040
ggttcggggc tggctccggg ctcggctcag gctcccccag ggtcccgccc catagagtcc
                                                                     2100
ggcttcctgg ggagaatgtg gaccgggccg gggcgggtct ccgggcgccg cttccctcag
                                                                     2160
gcggtctgat gagaggttcc tgcagcagaa agggagatgc agcgtccgct ccccagcgcg
                                                                     2220
cacccctt
                                                                     2228
```

<210> 6302 <211> 2636 <212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2637)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (110)...(1438)
<223> similar to gi35315 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6302 eccetecce teccetett tettetecte ectegtegee geegeegeeg eegeegeete 60 ageettegee teageegeeg eeegeteeeg eeegegegge gggattagtg acgateaate 120 caggatgctg cagactctgg ccggggtgaa ccttgctggg caattcgttg caggggggca 180 tggccctgcc gcctcccccg cacggccacg aaggggcgga cggcgacggc aggaagcagg 240 acateggega catectecae cagateatga ceateacega ceagagegtt ggacegagge 300 gcaagcaaag aaacatgccc tgaactgtca cagaatgaaa ccagcgctct tcagcgtcct 360 gtgtgagatc aaagagaaaa caggtctcag catcagagga gcccaggagg aggacctcc 420 cgatccccag ctaatgagac tggacaatat gcttttggca gaaggggttt caggtccctg 480 agaaaggtgg gggatcggcg gcagcagctg cagccgcggc agcctctgga ggttcttcag 540 ataactetat tgaacaette agattacega geecaaatga eecaggatea ggeeaaatet 600 atcacacaga actggagaaa tattgaacag gcatgtaatt gaatttacta cacatgtgat 660 ggaccttctt ccgaggaacc agagttagga acacgtcccc atttcctccc aaaagagatt 720 gaaagaaatg gtggggcatc atccatccga aaattttagt tccattcaga ttgcaqcttc 780 aaccaaagca ctttgttgaa gcagttatga ttttaagatc aaggttcctt gatgccagac 840 ggaaaaggcg taacttcagt aaacaggcca cagaaatctt gaatgaatat ttttactcac 900 acctcagcaa cccctacccc agtgaagaag ccaaagagga gctggccaag aaatgcagca 960 tcacagtgtc acaggtatcc aattggtttg gcaacaaacg aatcaggtac aagaagaaca 1020 ttggcaagtt tcaggaagaa gccaacctct atgctgcaaa gacggccgtg acagctgcac 1080 acgcagtage ageagetgtg cagaacaace agaccaatte geccaceaca ccaaatteeg 1140 gttcttctgg ttcttttaac ctcccaaatt ctggggacat gttcatqaac atgcagagtc 1200 tgaatgggga ttcttaccaa gggtcccaag tcggagccaa tgtgcaatca cagggtggat 1260 accetecgte atgttateaa teagaeggga ggetaeagtg atggeettgg aggaaattea 1320 ctgtacagtc cacataattt aaatgctaat ggaggctggc aggacgcaac aactccatct 1380 tetgtgaett eteetacaaa aggeeceagg aagtgtgeae teggataeet etaaettaat 1440 ctctggccac acttttccct gagctacatg ccttgataag tgcattcaga gcaataggag 1500 gaaaaggaaa gcgtttttgt agcccaccat ctacagcttt actgtaaaac cttgtcttat 1560 tcgagaactt gggtaaaatc tggnttttt aaaggaatca taatcattgt gtatttatac 1620 ttaaaaacac acaatgttaa aaaaaaataa agcactttat ccaattaggc caagatttaa 1680 cattgttgac agtcctgtag ctattttatc ataatttatt atcaatattt tacattaatt 1740 gtttcacagt tgccaattac ttggccttaa ggggtaaaaa gtaccatata cactaaacct 1800 caacccgtta aaggcagatg caaaaattta cctcacctaa attggaactt cttggcatat 1860 tttccattac tgacttggga ttgtctttct ttcatatcac ttatgggggt tggggaataa 1920 ggagctgttt gcctattccc tgttaatgat ggttgtgttt aagaatcttc ctcgtcacgt 1980 ttgtgttcag atctcttatg ttataattag atcagagact ggtagcatcg tttctctct 2040 tgaaagcacc agtgcccaga gtctgctcgg taataaaatt atgggatcca gattgttctg 2100 agagacggag gatacttgct gcttgataga ggtgaaaacg agattgatcc gtctggggtt 2160 ttacggtgtg cactgggtgc tgcacagact tgtcaaggtt tgctacgtcc tctggggcat 2220 ctgcaaaagg ccctgctctc tggagtgttg tatatagtgt agcaaaagag tatttataca 2280 tcccaccaat caaaacacag ctttattacc tcatgcgaac tcatacaaac caatagaatt 2340 tcaacatgtt ctgtagctta gagtgctcac ttactacctc tgaacaatac tcacgctgta 2400

```
gtttgtctct ttcttatctt tttgcatctt gtaattaact ctttqtttcc cttcataaaa
                                                                     2460
tgtaatgtac attgtaatct tttaaaagaa aaatcagggt tgcacttgca acttttaaaa
                                                                     2520
aaccgagtgt ggaaacattg ggtcttaatt caacacagga tcggtaaaac tgttgtaaat
                                                                     2580
actgagaaac attttgaatg ttcttcatct tattactaat ccatgcaaaa aaaaaa
                                                                     2636
     <210> 6303
     <211> 609
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (11) . . . (330)
     <223> similar to gi1488610 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6303
cgggacgcgg atgcagacgc aggcggaggc gctgacggcg gggatggccg gggtggccac
                                                                       60
agetggegeg ggggegtgga cacageegea geteeggeeg gtggagetee eecagegeae
                                                                      120
gcgccaggtc cgggcagaga cgccgcgtct gcggccaggg ggtcacgaat gcggccgcac
                                                                      180
atattcaccc tcagcgtgcc tttcccgacc cccttggagg cggaaatcgc ccatgggtcc
                                                                      240
ctggcaccag atgccgagcc ccaccaaagg gtggttggga aggatctcac agtgagtggc
                                                                      300
aggatectgg tegteegetg gaaagetgaa gaetgtegee tgeteegaat tteegteate
                                                                      360
aactttettg accagettte eetgggtggg tgeggaceat geagegettt gggeeeceeq
                                                                      420
tttcccgcta agcctggcct gggcaaatgg agcgaggtcc cactttgcgt ctccttgtag
                                                                      480
gcagtgcgtc catcettece tagggcagga atteccacag ttgctacttt cetgggaggg .
                                                                      540
cctcatgttt tatctggttc ttaaatgttt gttactacag aaaataaaac tgcgctacta
                                                                      600
aaaaaaaa
                                                                      609
     <210> 6304
     <211> 1533
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1499)...(680)
     <223> similar to gi31463 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6304
ttttttttt ttcacagctt caagcctttt attccatttt ggtaggtttg tataaaaata
```

ctctctttag gaaaataaat agcagctgcc ctcgctgtgg aggcttggat tccctggagc

60

120

```
tgaaggette teaaagetga gateegeaga teageteate acagaageea agggegeete
                                                                      180
ctgagctgtg cggttcagga gggggcggca gaatggcctg gtccaatcac ctgctgctgc
                                                                      240
tggcagtggg gctggtgagt tagtgttcta ggtgggtaaa gtggcacctt ctgtcaggag
                                                                      300
atagggttgg gtggatcaca ggaagaggt gatggagagt gtggcagtga tctggaaggg
                                                                      360
gttagggete cagageceet ctaaggatet acaaagtetg tgggetteca ggatteetee
                                                                      420
ggcagaaatg ggaaatattt tgtctctgat ttagtgcaaa ttgtgctaga gaggccagct
                                                                      480
ctagagaaac aatgggcagc tttggtggcc ccaagctggc tctactgtga agcacaatat
                                                                      540
ggttagtctc attagaggga tggagaagca gctgctggag ttgggtatgg gatactgtcc
                                                                      600
aggccagctg gactggtggg ggaaggggag cagacgttgc ttagggtggc acctgcaggg
                                                                      660
agtaaggete gggtgeetea caaagegagg agggttggag agecaagggg gteagaggat
                                                                      720
gggtctccgc tgctgctgct actcttgcga tgagctgagg cacaaggctc aggagtgctg
                                                                      780
gggtaggtga agcccaggct gggggtgaaa ggagttaggg agggtgtggt catgagtgtg
                                                                      840
ggggtgtgca gtgcctcagg ttcaagcaca ggccctgggg aaagggagat acaaggtaca
                                                                      900
gggcggcagg gggctggtgg gctgctggtg ccactggtac tgcctgtgtc cccctccttg
                                                                      960
gctccttccg ggattttgca gatgggtcgg tgggcttcca gcaccagctc taggcgctcc
                                                                     1020
ttetgettet geageteete aatetetege tgeageceag attteteate ttecagtttq
                                                                     1080
tcagtctccg cctgcaggaa gtcggtcagt tccttcctcc ggttcctgca cttggccgca
                                                                     1140
gccagcttgt tccgctcgcg ccttactcgg cggcgctcct cttcctccgg gctgatctgt
                                                                     1200
teacaaggee ttegaegtae eeetggagge ggeeeeaggg eeeggatgae tteettqgee
                                                                     1260
ggggctgtgg ggggctgtac tgagggtagg tcagaggcct ggggtaacct gctqqqcccc
                                                                     1320
aggaaatgag gctgtaccat ccactgcagc tcctgactgc cactcatggt gttgatgctt
                                                                     1380
ggcaccaggt ggaacttctg ctgggctgcc tgcgctgcgg ccgggggctg cgcggggccg
                                                                     1440
ccgtacccgc cgccgttccc ggagctcggg ccgggttccc cgaagtctcg gaacatgccc
                                                                     1500
ggggctggcg gctctgcggg gtacacggct gct
                                                                     1533
```

```
<210> 6305
<211> 2232
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2233)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (213)...(1543)
<223> similar to gi2765411 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6305
gegggeegee gtacgeegg ggetgegget etceegegtg ggeegeggee geteggetee
                                                                       60
gegggeagee gegeegteet geecegegeg egegetagee getgteggee geaggageee
                                                                      120
cgggaatctg gaggggccgt ggggcggagg gcggggcctg cgggcggacg gcggccgaag
                                                                      180
ccgcacggga gacgacgagg aggagccgga agatgcggac gagaacgccg aggaggagct
                                                                      240
gctgcgggga gagcctctgc tgccggcggg gacccagcgc gtgtgtctgg ttcaccctga
                                                                      300
cgtcaagtgg ggcccgggga agtcgcagat gactcgagcc gagtggcagg tggcggaggc
                                                                      360
cacagegetg gtgcacaege tggacggetg gteegtggtg cagacaatgg tegtgteeae
                                                                      420
caaaacgccg gacaggaagc tcatctttgg caaagggaac tttgagcacc tgacagaaaa
                                                                      480
```

```
gateegaggg tetecagaca teaegtgegt etteetgaae gtggagagga tggetgeece
                                                                      540
gaccaagaaa gaactggaag ccgcctgggg cgtggaggtg tttgaccgct tcacggtcgt
                                                                      600
cetgeacate tteegetgta aegecegeae gaaggaggee eggetteagg tggeeetgge
                                                                      660
ggagatgccg ctgcacaggt cgaacttgaa aagggacgtc gcccacctgt accgaggagt
                                                                      720
eggetegege tacateatgg ggteaggaga atcetteatg eagetqeaqe ageqteteet
                                                                      780
gagagagaag gaggctaaga tcaggaaggc cttggacagg cttcgcaaga agaggcacct
                                                                      840
gctccgccgg cagcggacga ggcgggagtt ccccgtgatc tccgtggtgg ggtacaccaa
                                                                      900
ctgcggaaag accacgctga tcaaggcact gacgggcgat gccgccatcc agccacggga
                                                                      960
ccagctgttt gccacgctgg acgtcacgtg cccacgcggg cacgctgccc tcacgcatga
                                                                     1020
cegtectgta egtggacace ateggettee teteceaget geegeaegge etcategagt
                                                                     1080
cetteteege caccetggaa gacgtggeee acteggatet catettgeae gtgagggaeg
                                                                     1140
ttcagccacc ccgagggcgg agctccagaa atgcagcgtt ctgtccacgc tgcgtggcct
                                                                     1200
gcagctgccc gccccgctcc tggactccat ggtggaggtt cacaacaagg tggacctcgt
                                                                     1260
gcccgggtac agccccacgg aaccgaacgt cggtgnccgt gtctgccctg cggggccacg
                                                                     1320
gggctccagg agctgaaagc tgagctcgat gcggcggttt tgaaggcgac ggggagacag
                                                                     1380
atcctcactc tccgtgtgag gctcgcaggg gcgcagctca gctggctgta taaggaggcc
                                                                     1440
acagttcagg aggtggacgt gatccctgag gacggggcgg ccgacqtqaq qqtcatcatc
                                                                     1500
agcaactcag cctacggcaa attccggaag ctctttccag gatgaacgga cgcccacaga
                                                                     1560
ggcctgcggg gtgggggcat cgctgcctgg ggagctgagg cgttaccgct gtgttggggg
                                                                     1620
cagettggtg teaggtgeag eagggteete ettgtetggt tetgeaceeg tetegeteee
                                                                     1680
agccatttgc tgggatgacc gtgcaggccg gtgacacggc cgcacctgcc ccaaagcggg
                                                                     1740
ccgcccgagc gtccactcca agcctgagca tccacacaat tccagtgggc cctcggtgcc
                                                                     1800
tgctgtgaac tgctttccct cggaatgttt ccgtaacagg acattaaacc tttgttttta
                                                                     1860
cttccgtgag cagcatttcc agttcctcct gcacctgccg tgagccgtgg ccctggtggg
                                                                     1920
caccgacggc ccctccgccc ggctgtctgt gttcacagat ggtctcggtt tcccatggtg
                                                                    1980
gtgtcgggga aatgacgaaa aatcaggttt cccggcagca cagagaaccc ttccacaaaa
                                                                    2040
gtagaaggga aagcaaatag ttttactaaa gaagcagctt caaaccagac cgtgagccac
                                                                    2100
cgcacccggc ctccttgagt taacattttc taaagatgcc tccggcgtgc ttatccttga
                                                                    2160
aagctgccag aggtgtcttg gctgcattgg tggtaataaa attcatactc atatttgact
                                                                    2220
ttaaaaaaaa aa
                                                                    2232
```

```
<210> 6306
<211> 2551
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2552)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (700)...(1788)
<223> similar to gi3135887 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6306
caggaagggc catgaagatt aataaagatt tggactcagg gcaaatattt acttagtagc 60
aataactcaa agaattactg ttgaataaat aagccaatta agcagccaat cacgtactat 120
```

```
geggatgeac acaaatgaaa ceetcaette aacetgaaga cattegeaca tgaqttaeqt
                                                                      180
agagggacct gcaggaagcg gtagagaaaa cataaggctt atgcgtttaa tttccacacc
                                                                      240
aatttcagga tctttgtcac tgacagcagc actaagactt gttaacttta tatagttaag
                                                                      300
aagaacaagg ctgagcgcga tgactcacgc ctgtaagcct agaactttgg gaggccaaag
                                                                      360
caggcagact gcttgagccc aggagttcca qaccaqcctq qqcaacatqq caacacccca
                                                                      420
tctctacaaa aaaatacaag aatcagctgg gcgtggtgat gtgttcctgt aatctcagct
                                                                      480
actogggagg cagaggcagg aggattgctt gaaccoggga ggcagaggtt gtagttagco
                                                                      540
gagatetege caetgeacte cagtetggae gacagagtga gaeteagtet caaataaata
                                                                      600
aataaataca taaatataag gaaaaaaata aagctgcttt ctcctcttcc tcctctttgg
                                                                      660
teteatetgg etetgeteca ggeatetgee acaaagtggg tgettacace tgetgetttt
                                                                      720
gctgggaagc tcttgagtgt gttcaggcaa cctctgagct ctctgtqqaq qaqcctqqtc
                                                                      780
ccgctgttct gctggctgag ggcaaccttc tggctgctag ctaccaagag gagaaagcag
                                                                      840
cagetggtee tgagagggee agatgagaee aaagaggagg aagaggaeee teetetgeee
                                                                      900
accaccccaa ccagogtgaa ctatcacttc actogccagt gcaactacaa atgoggottc
                                                                      960
tgtttccaca cagccaaaac atcctttgtg ctgccccttg aggaagcaaa gagaggattg
                                                                     1020
cttttgctta agggaggctg gtattggaga agatcaactt ttcaqqtqqq aqaqccattt
                                                                     1080
cttcaagacc ggggagaata cctgggcaag ttggtgaggt tctgcaaagt agagttgcgg
                                                                     1140
ctgcccagcg tgagcattcg tgagcaatgg aagcctgatc cgggagaggt ggttccagaa
                                                                     1200
ttatgggtga gtatttggac attctcgcta tctcctgtga cagctttgac gaggaagtca
                                                                     1260
attgtcctta ttggccgtgg caatgagaaa gaagaaccat gtggaaaacc ttcaaaagct
                                                                     1320
gatggaggtg gtgtagggat tatagagtcc ctttcaagat aaattctgtc attaatccgt
                                                                     1380
ttcaacgtgg aagaggacat gacggaacag atcaaagcac taaaccctgt ccgctggaaa
                                                                     1440
gtgttccagt gcctcttaat tgaaggtgag aattgtggag aagatgctcc tnagagaagc
                                                                     1500
agaaagattt gttattggtg atgaagaatt tgaaagattc ttggagcgcc acaaagaagt
                                                                    1560
gtcctgcttg gtgcctgaat ctaaccagaa gatgaaagac tcctacctta ttctggatga
                                                                    1620
atatatgcgc tttctgaact gtagaaaggg acggaaggac ccttccaagt ccatcctgga
                                                                    1680
tgttggtgta gaagaagcta taaaattcag tggatttgat gaaaagatgt ttctgaagcg
                                                                    1740
aggaggaaaa tacatatgga gtaaggctga tctgaagctg gattggtaga gcggaaagtg
                                                                    1800
gaacgagact tcaacacacc agtgggaaaa ctcctagagt aactgccatt gtctgcaata
                                                                    1860
ctatcccgtt ggtatttccc agtggctgaa aacctgattt tctgctgcac gtggcatctg
                                                                    1920
attacctgtg gtcactgaac acacgaataa cttggatagc aaatcctgag acaatggaaa
                                                                    1980
accattaact ttacttcatt ggcttataac cttgttgtta ttgaaacagc acttctgttt
                                                                    2040
ttgagtttgt tttagctaaa aagaaggaat acacacagga ataatgaccc caaaaatgct
                                                                    2100
tagataaggc ccctatacac aggacctgac atttagctca atgatgcgtt tgtaagaaat
                                                                    2160
aagctctagt gatatctgtg ggggcaatat ttaatttgga tttgattttt taaaacaatg
                                                                    2220
tttactgcga tttctatatt tccattttga aactatttct tgttccaggt ttgttcattt
                                                                    2280
gacagagtca gtattttttg ccaaatatcc agataaccag ttttcacatc tgagacatta
                                                                    2340
caaagtatet geeteaatta tttetgetgg ttataatget ttttttttt tttgetttta
                                                                    2400
tgccattgca gtcttgtact ttttactgtg atgtacagaa atagtcaaca gatgtttcca
                                                                    2460
aaaaccttag aatgggaaac ccccccatt tttaaaaagg cctttaaaaa aaaaaacccc
                                                                    2520
tgggaaaaac ggggggggc ccccacccc g
                                                                    2551
```

```
<210> 6307
<211> 3482
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (81)...(1926)
<223> similar to gi3769610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6307 ctgctgccgc cgccgccgcc gccgtccctg cgtccttcgg tctctgctcc cgggacccgg 60 ctccgccgca gccagccagc atgtcgggga tcaagaagca aaagacggag aaccagcaga 120 aatccaccaa tgtagtctat caggcccacc atgtgagcag gaataagaga gggcaagtgg 180 ttggaacaag gggtgggttc cgaggatgta ccgtgtggct aacaggtctc tctggtgctg 240 gaaaaacaac gataagtttt gccctggagg agtaccttgt ctcccatgcc atcccttgtt 300 actccctgga tggggacaat gtccgtcatg gccttaacag aaatctcgga ttctctcctg 360 gggacagaga ggaaaatatc cgccggattg ctgaggtggc taagctgttt gctgatgctg 420 gtctggtctg cattaccagc tttatttctc cattcgcaaa ggatcgtgag aatgcccgca 480 aaatacatga atcagcaggg ctgccattct ttgaaatatt tgtagatgca cctctaaata 540 tttgtgaaag cagagacgta aaaggcctct ataaaagggc cagagctggg gagattaaag 600 gatttacagg tattgattct gattatgaga aacctgaaac tcctgagcgt gtgcttaaaa 660 ccaatttgtc cacagtgagt gactgggtcc accaggtagt ggaacttctg caagagcaga 720 acattgtacc ctatactata atcaaagata tccacgaact ctttgtgccg gaaaacaaac 780 ttgaccacgt ccgagctgag gctgaaactc tcccttcatt atcaatatac taagctggat 840 ctccagtggg tccaggtttt gagcgaaggc tgggccactc ccctcaaagg tttcatgcgg 900 gagaaggagt acttacaggt tatgcacttt gacaccctgc tagatgatgg cgtgatcaac 960 atgagcatcc ccattgtact gcccgtctct gcagaggata agacacggct ggaagggtgc 1020 agcaagtttg teetggeaca tggtggaegg agggtageta tettaegaga egetgaatte 1080 tatgaacaca gaaaagagga acgctgttcc cgtgtttggg ggacaacatg tacaaaacac 1140 ccccatatca aaatggtgat ggaaagtggg gactggctgg ttggtggaga ccttcaggtg 1200 ctggagaaaa taagatggaa tgatgggctg gaccaatacc gtctgacacc tctggagctc 1260 aaacagaaat gtaaagaaat gaatgctgat gcggtgtttg cattccagtt gcgcaatcct 1320 gtccacaatg gccatgccct gttgatgcag gacactcgcc gcaggctcct agagaggggc 1380 tacaagcacc cggtcctcct actacaccct ctgggcggct ggaccaagga tgacgatgtg 1440 cctctagact ggcggatgaa gcagcacgcg gctgtgctcg aggaaggggt cctggatccc 1500 aagtcaacca ttgttgccat ctttccgtct cccatgttat atgctggccc cacagaggtc 1560 cagtggcact gcaggtcccg gatgattgcg ggtgccaatt tctacattgt ggggagggac 1620 cctgcaggaa tgccccatcc tgaaaccaag aaggatctgt atgaacccac tcatgggggc 1680 aaggtettga geatggeece tggeeteace tetgtggaaa teatteeatt eegagtgget 1740 gcctacaaca aagccaaaaa agccatggac ttctatgatc cagcaaggca caatgagttt 1800 gacttcatct caggaactcg aatgaggaag ctcgcccggg aaggagagaa tcccccagat 1860 ggcttcatgg cccccaaagc atggaaggtc ctgacagatt attacaggtc cctggagaag 1920 aactaagcct ttggctccag agtttctttc tgaagtgctc tttgattacc ttttctattt 1980 ttatgattag atgctttgta ttaaattgct tctcaatgat gcattttaat cttttataat 2040 gaagtaaaag ttgtgtctat aattaaaaaa atatatatat atatacacac acacatatac 2100 atacaaagtc aaactgaaga ccaaatctta gcaggtaaaa gcaatattct tatacatttc 2160 ataataaaat tagctctatg tattttctac tgcacctgag caggcaggtc ccagatttct 2220 taaggetttg tttgaccatg tgtctagtta cttgctgaaa agtgaatata ttttccagca 2280 tgtcttgaca acctgtactc ttccaatgtc atttatcagt tgtaaaatat atcagattgt 2340 gtcctcttct gtacaattga caaaaaaaa aattttttt tctcactcta aaagaggtgt 2400 ggctcacatc aagattcttc ctgatatttt acctcatgct gtacaaagcc ttaatgttgt 2460 aatcatatct tacgtgttga agacctgact ggagaaacaa aatgtgcaat aacgcgaatt 2520 ttatcttaga gatctgtgca gcctatttct gtcacaaaag ttatattgtc taataagaga 2580 agtettaatg geetetgtga ataatgtaae teeagttaea eggtgaettt taatageata 2640 cagtgatttg atgaaaggac gtcaaacaat gtggcgatgt cgtgggaaag ttatctttcc 2700 cgctctttgc tgtggtcatt gtgtcttgca gaaaggatgg ccctgatgca gcagcagcgc 2760 cagctgtaat aaaaaataat tcacactatc agactagcaa ggcactagaa ctggaaaaga 2820 ccacagaaaa caaagaatcc aaccetttca tettacaggt gaacaaactg tgatgatgca 2880 catgtatgtg ttttgtaagc tgtgagcacc gtaacaaaat gtaaatttgc cattattagg 2940 aagtgctggt ggcagtgaag aagcacccag gccacttgac tcccagtctg gtgccctgtc 3000 tacaccagac aacacaggag ctgggtcaga ttcccctcag ctgcttaaca aagttcctcg 3060 aacagaaagt gcttacaaag ctgccttctc ggatactgaa aggtcgagtt ttctgaactg 3120 cactgatttt attgcagttg aaaaaaaaaa aaagctattc caaaaatttc aagctgttct 3180

```
gagacatett etgatggett taetteetga gaggeaatgt titttaettt atgeataatt 3240 cattgitgee aaggaataaa gigaagaaac ageacettit aatatatagg tetetetgga 3300 agagacetaa attagaaaga gaaaacigig acaatiitea taiteteati ettaaaaaac 3360 actaatetta actaacaaaa gitettitga gaataagita cacacaatgg eeacageagi 3420 tigiettitaa tagtatagig eetataetea tigiaateggi taateactae tigiettitaaa 3480 aa 3482
```

```
<210> 6308
<211> 6617
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6618)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (389)...(1418)
<223> similar to gi5689439 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6308 cgtcccggaa ttctcgggtc gacgatttcg tgtgtcgaag aaacctgact gcgccctgag 60 gagaacageg gagaaggtee accgageetg gegaaaggte egetgagegg getgtegtee 120 ggagccactc cgggctgcgg agcacccagt ggagaccgcg cctggctcag gtgtgggacc 180 ccatccttcc tgtcttcgca gaggagtcct cgcgtgaaat aagcgggttt tgaaaacaaa 240 aaaaagaagg agtggaagag ggggccagga tccaggcctc catccccaca gaagtgaagc 300 tacagetggg aggtetecte ceaececaae egteaecetg ggteecgaet geceaectee 360 tectectece ectececca acaacaacaa caacaacaac tecaagcaca eeggecataa 420 gagtgcgtgt gtccccaaca tgaccgaacg aagaagggac gagctctctg aagagatcaa 480 caacttaaga gagaaggtca tgaagcagtc ggaggagaac aacaacctgc agagccaggt 540 gcagaagctc acagaggaga acaccaccct tcgagagcaa gtggaaccca cccctgagga 600 tgaggatgat gacatcgagc tccgcggtgc tgcagcagct gctgccccac cccctccaat 660 agaggaagag tgcccagaag acctcccaga gaagttcgat ggcaacccag acatgctggc 720 teettteatg geecagtgee agatetteat ggaaaagage accagggatt teteagttga 780 tegtgteegt gtetgetteg tgacaageat gatgacegge egtgetgeee gttgggeete 840 agcaaagctg gagcgctccc actacctgat gcacaactac ccagctttca tgatggaaat 900 gaagcatgtc tttgaagacc ctcagaggcg agaggttgcc aaacgcaaga tcagacgcct 960 gcgccaaggc atggggtctg tcatcgacta ctccaatgct ttccagatga ttgccccagg 1020 acctggattg gaacgageet gegetgattg accagtacea egagggeete agegaceaea 1080 ttcaggagga gctctcccac ctcgaggtcg ccaagtcgct gtctgctctg attgggcagt 1140 gcattcacat tgagagaagg ctggccaggg ctgctgcagc tcgcaagcca cgctcgccac 1200 cccgggcgct ggtgttgcct cacattgcaa gccaccacca ggtagatcca accgagccgg 1260 tgggaggtgc ccgcatgcgc ctgacgcagg aagaaaaaga aagacgcaga aagctgaacc 1320 tgtgcctcta ctgtggaaca ggaggtcact acgctgacaa ttgtcctgcc aaggcctcaa 1380 agtettegee ggegggaaac teeceggeee egetgtagag ggacetteag egacegggee 1440 agaaataata aggtccccac aagatgatgc ctcatctcca cacttgcaag tgatgctcca 1500 gattcatctt ccgggcagac acaccctgtt cgtccgagcc atgatcgatt ctggtgcttc 1560

```
tggcaacttc attgatcacg aatatgttgc tcaaaatgga attcctctaa gaatcaagga
                                                                     1620
ctggccaata cttgtggaag caattgatgg gcgccccata acatcgggcc cagttgtcca
                                                                     1680
cgaaactcac gacctgatag ttgacctggg agatcaccga gaggtgctgt catttgatgt
                                                                     1740
gactcagtct ccattettee etgtegteet aggggttege tggetgagea cacatgatee
                                                                     1800
caatatcaca tggagcactc gatctatcgt ctttgattct gaatactgcc gctaccactg
                                                                     1860
ccggatgtat tctccaatac caccattggt cccaccacca gcaccacaac cgccactcta
                                                                     1920
ttatccagta gatggatacc gagtttacca accagtgagg gattactatg tccagaatgt
                                                                     1980
gtacactcca gtagatgagc acgtctaccc acatcaccgc ctgggtgacc ctcacataga
                                                                     2040
aatgatacct ggagcacaca gtattcccag tggacatgtg tattcactgt ccgaacctga
                                                                     2100
aatggcagct cttcgagatt ttgtggcaaa gaaatgtaaa agatgggcta attactccaa
                                                                     2160
cgattgcacc ctaatggagc ccaaagttct cccaggtgaa gagggggtgg aaactgcaag
                                                                     2220
tttcttatga ttgccgagct ccaaacaatt ttactatcca gaatcagtat cctcgcctat
                                                                     2280
ctattccaaa tttagaagac caagcacacc tggcaacgta cactgaattc gtacctcaaa
                                                                     2340
tacctggata ccaaacatac cccacatatg ccgcgtaccc gacctaccca gtaggattcg
                                                                     2400
cctggtaccc agtgggacga gacggacaag gaagatcact atatgtacct gtgatgatca
                                                                     2460
cttggaatcc acactggtac cgccagcctc cggtaccaca gtacccgccg ccacagccgc
                                                                     2520
cgcctccacc accaccaccg ccgccgcctc catcttacag taccctgtaa atacctgtca
                                                                     2580
tgtccttcag gatctctgcc ctcaaaattt attcctgttc agcttctcaa tcagtgactg
                                                                     2640
tgtgctaaat tttaggctac tgtatcttca ggccacctga ggcacatcct ctctgaaacg
                                                                     2700
gctatggaag gttagggcca ctctggactg gcacacatcc taaagcacca aaagaccttc
                                                                     2760
aacattttct gagagcaaca gagtatttgc caataaatga tctctcattt ttccaccttg
                                                                     2820
actgccaatc taactaaaat aattaataag tttactttcc agccagtcct ggaagtctgg
                                                                     2880
gttttacctg ccaaaacctc catcaccatc taaattatag gctgccaaat ttgctgttta
                                                                     2940
acatttacag agaagctgat acaaacgcag gaaatgctga tttctttatg gaggggaga
                                                                     3000
cgaggaggag ggggacatga cttttcttgc ggtttcggta ccctctttt aaatcactgg
                                                                     3060
aggactgagg ccttattaag gaagccaaaa ttatcggtgc agtgtggaaa ggcttccgtg
                                                                     3120
atcctctcgc tgcaccctta gaaacttcac cgtcttcaaa ctccatttcc atggttctgt
                                                                     3180
taatteteaa ggageageaa etegaetggt teteecagga geaggaaaaa eeettgtgae
                                                                     3240
atgaaacatc tcaggcctga aaagaaagtg ctctctcaga tggactcttg catgttaaga
                                                                     3300
ctatgtcttc acatcatggt gcaaatcaca tgtacccaat gactccggct ttgacacaac
                                                                     3360
accttaccat catcatgcca tgatggcttc cacaaagcat taaacctggt aaccagagat
                                                                     3420
tactggtggc tccagcgttg ttagatgttc atgaaatgtg accacctctc aatcaccttt
                                                                     3480
gagggctaaa gagtagcaca tcaaaaggac tccaaaatcc catacccaac tcttaagaga
                                                                     3540
tttgtcctgg tacttcagaa agaattttca tgagtgttct taattggctg gaaaagcacc
                                                                     3600
agctgacgtt ttggaagaat ctatccatgt gtctgcctcc atatgcatct gggcatttca
                                                                     3660
tcttcagtcc cctcattaga ctgtagcatt aggatgtgtg gagagaggag aaatgattta
                                                                     3720
gcacccagat tcacactcct atgcctggaa gggggacatc tttgaagaag aggaattagg
                                                                     3780
gctgtggaca ctgtcttgag gatgtggact tccttagtga gctccacatt acttgatggt
                                                                     3840
aaccacttca aaaggatcag aatccacgta atgaaaaagg tccctctaga ggatggagct
                                                                     3900
gatgtgaagc tgccaatgga tgaaaagcct cagaaagcaa ctcaaaggac tcaaagcaac
                                                                     3960
ggacaacaca agagttgtct tcagcccagt gacacctctg atgtcccctg gaagctttgt
                                                                     4020
gctaacctgg gactgcctga cttcctttag cctggtccct tgctactacc ttgaactgtt
                                                                     4080
ttatctaacc tctcttttc tgtttaattc tttgctactg ccattgaccc tgctgcagga
                                                                     4140
tttgtgtcat tttcctgcct ggttgctgag actccatttt gctgccacac acagagatgt
                                                                     4200
aagaggcagg ctttaattgc caaagcacag tttgagcagt agaaaacaac atggtgtata
                                                                     4260
tctcaaattg cctgacatga agaggagtct aacggtgaag tttcactttt catcagcatc
                                                                     4320
atctttcaca tgttcattat catccgctct tattcttgca tgtttaaaca cttaaaattt
                                                                     4380
ttagtataat ttttagtgtg ttttgaagtg gtgactaggc tttcaaaaac ttccattgaa
                                                                     4440
ttacaaagca ctatccagtt cttattgtta aactaagtaa aaatgataag taacatagtg
                                                                     4500
taaaatattc ctttactgtg aacttcttac aatgctgtga atgagaggct cctcagaact
                                                                     4560
ggagcatttg tataataatt catcctgttc atcttcaatt ttaacatcat atataatttc
                                                                     4620
aattctatca attgggcctt taaaaatcat ataaaaggat ataaaatttg aaaagagaaa
                                                                     4680
cctaattggc tatttaatcc aaaacaactt tttttttcct tcaatggaat cagaaagctt
                                                                     4740
gtcaatcact catgtgtttt agagtaatta cttttaaaat ggtgcatttg tgcttctgaa
                                                                     4800
ctattttgaa gagtcacttc tgtttacctc aagtatcaat tcatcctcca tacatttgaa
                                                                     4860
ttcaagttgt tttttgtcaa atttacagtt gtcaattgat cttcaagctg cagggtgcct
                                                                     4920
agaaatgggc cgttgtctgt agccctggca tgtgcacacg gacatttgcc accactgcaa
                                                                     4980
```

```
gcaaaagtct ggagaagttc accaacgaca aqaacgatta gggaaaatat qctqctqtqq
                                                                    5040
gttaacaact cagaaagtcc ctgatccaca tttggctgtt tactaaagct tgtgattaac
                                                                    5100
tttttggcag tgtgtactat gctctattgc tatatatgct atctataaat gtagatgtta
                                                                    5160
aggataagta attctaaatt tattattcta tagttttgaa gtttggttaa gtttcctttc
                                                                    5220
actcaattga tttattttgt tgttaatcaa atttatgtta attggatcct ttaaattttt
                                                                    5280
tttggcattt tccaacaaaa atggctttat tcataagaaa ggaaaaaaat caatggaatt
                                                                    5340
tgatatctaa agaagttaga aagggagcaa aataaaaaac ataaaggaga tagatqaatt
                                                                    5400
agtaagcaaa tcagtagtcg agtttttcaa actggcaaaa ttaattaatt gacttttagc
                                                                    5460
ccaaatttac attgttaatt aaatcaagaa ggaagaagat ctaagagctc ccattgatag
                                                                    5520
gcaagcctag agagaactag ctaaatttat catgctagga tattgaaaca cagaaagttt
                                                                    5580
acatacattt atgaagggtc aatttagttt ggacagtgag gtatttgtct tagtggaaaa
                                                                    5640
aaggagaatt agtctgatca aatcgtgaag taatacagtg aacttgcagg tgcacaaaat
                                                                    5700
aagagggcca catctatatg gtgcagtctg gaattctgtt taagtttgta ggtacctctt
                                                                    5760
ggacttctga attgatccag ttgtnattca tccaccacag acatctcaca tccagataca
                                                                    5820
gacagttcca agattgacaa cagagaacaa cctggctgga aaagacctgg ggcagaaatg
                                                                    5880
ggagagccct gcgggaaacc atgctaccat ttttcttcta aagaqagaat qcacatctga
                                                                    5940
tgagactgaa agttctttgt tgttttagat tgtaggaatg gtattgaatt ggtctgtgga
                                                                    6000
aaattgcatt gcttttattt ctttgtgtaa tcaagtttga agtaataggg ggatatataa
                                                                    6060
tccatgaagg cattttaggg gtggggaggg actatttaag taattttaa gtggggttgg
                                                                    6120
ggttatttag gaattgttta ggaattatat tatgtattag atatcgctat aagtggacat
                                                                    6180
gcgtacttac ttgtaaccct ttaccctata attgctatcc ttaaagattt caaataaact
                                                                    6240
cggagggaac tgcagggaga ccaacttatt tagagcgaat tggacatgga taaaaacccc
                                                                    6300
agtgggagaa agttcaaagg tgattagatt aataatttaa tagaggatga gtgacctctg
                                                                    6360
ataaattact gctagaatga acttgtcaat gatggatggt aaattttcat ggaagttata
                                                                    6420
aaagtgataa ataaaaaccc ttgcttttac ccctgtcagt agccctcctc ctaccactga
                                                                    6480
accccattge cectaceest estetaact trattgetgt attetettea etetatattt
                                                                    6540
ctctctattt gctaatattg cattgctgtt acaataaaaa ttcaataaag atttagtggt
                                                                    6600
taagtgcaaa aaaaaaa
                                                                    6617
```

```
<210> 6309
<211> 4855
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (873)...(3093)
<223> similar to gi4589678 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6309
cggccgcccg acgctctctg ctcgcgcttg ggctcgcgat ggggaagaag tcccgggcgg
                                                                       60
tacceggeeg taggeceate etgeaactet eteegeeggg teetegggge ageaegeegg
                                                                      120
geegggaeee ggageeggaa eeegaeaetg ageeggaete aacegeggeg gteeceagee
                                                                      180
agecegeece gteggeggeg acgaecaceg eggtgaetge egeegeggee teggaegaet
                                                                      240
cgccttcaga agatgaacag gaagcggtgc aggaggttcc tagagttgtt cagaatcctc
                                                                      300
caaaaccagt catgaccact agacccacag ctgttaaagc aacaggcggt ctatgcttgc
                                                                      360
ttggtgctta tgctgacagt gatgacgatg acaatgatgt ttccgaaaaa ctagcacaat
                                                                      420
ccaaagagac aaatggaaac cagtcaactg atattgatag tacattggcc aacttcctag
                                                                      480
cggagatcga tgccataaca gctcctcagc ctgcagctcc tgtaggagct tctgctccac
                                                                      540
```

```
etecaactee acetegacea gagecaaagg aageageaae atetaceett tettetteta
                                                                      600
cttcaaatgg aacagactcc acccaaacat ctggttggca atatgatact cagtgttcac
                                                                      660
tggcaggagt cggaattgag atgggcgatt ggcaggaagt ctgggatgag aacacgggat
                                                                      720
gttattatta ttggaataca caaacaaatg aagtgacttg ggagttaccc caatatcttg
                                                                      780
ccacacaggt acagggatta cagcattacc agcccagttc tgtgccaggt gctgaaacta
                                                                      840
gttttgtggt aaatacagac atatattcta aggagaaaac gatttctgtt tccagtagta
                                                                      900
aaagtggacc agtcatagcc aagcgagaag ttaaaaagga agtaaatgaa ggaattcagg
                                                                      960
ctctctcaaa tagtgaggag gagaagaaag gggtggcagc atcgctgctt gctcctttat
                                                                     1020
tgcctgaggg aataaaagaa gaagaagag gatggagaag aaaagtaatt tgtaaagagg
                                                                     1080
agccagtttc agaagtaaaa gaaacaagta caacagtaga agaagcaaca acaatagtaa
                                                                     1140
agccacagga aattatgttg gacaatatag aagaccette teaggaggat etttgeagtg
                                                                     1200
ttgtccaatc tggagaaagt gaggaggaag aggaacaaga tacccttgaa ctggagctag
                                                                     1260
ttttggaaag gaaaaagca gagttgcgag ccttggagga aggagatggt agtgtgtcag
                                                                     1320
ggtctagtcc acgttctgat atcagccagc cagcatctca agatggaatg cgtaggctta
                                                                     1380
tgtctaaaag aggaaaatgg aagatgtttg ttccgagcta ccagttccag aatctaccag
                                                                     1440
taggagttct agtaaaactg gacgagatac tccagaaaat ggagaaactg caattggtgc
                                                                     1500
tgaaaattca gaaaaaatag atgagaattc agataaagag atggaagtag aagaatctcc
                                                                     1560
agagaaaata aaagtacaga caacaccaaa agtagaagaa gaacaggatt tgaaatttca
                                                                     1620
gattggagaa ctggcaaata ccctgacaag taaattcgag tttctaggca ttaatagaca
                                                                     1680
atccatctcc aactttcatg tgctgctctt acagactgag actcgaattg cagactggcg
                                                                     1740
ggaaggggct cttaatggaa actaccttaa acgaaaactt caggatgcag cagaacaact
                                                                     1800
aaaacagtat gaaataaacg ccactectaa aggetggtee tgecaetggg acagggatea
                                                                     1860
tagacggtat ttctatgtaa acgaacagtc gggcgagtct cagtgggagt ttccagatgg
                                                                     1920
tgaagaggaa gaagaagaaa gccaagcaca agaaaataga gatgagactc ttgccaaaca
                                                                     1980
gaccttgaaa gacaaaactg gcactgattc aaattcaaca gaatcctctg aaacttccac
                                                                     2040
aggttctctt tgtaaagaat ccttttctgg tcaagtttct tcttcatcac tcatgcgcag
                                                                     2100
cttcacctcc atttctggac cctccttcag tcaaatgttc ctgtgcttca acctccatta
                                                                     2160
ecettgggaa atgecaccae ececacetee acetecagaa teacetecae ecectectee
                                                                     2220
accacctcct cctgcggaag atggtgagat ccaggaggta gagatggagg atgagggaag
                                                                     2280
tgaggagccc cctgccccag gaacagagga agatacccct ttgaaacctt cagcacaaac
                                                                     2340
cacagttgta actagecaga gttcagttga ttecaceate tetagttett ettecactaa
                                                                     2400
aggaataaag aggaaagcta cagaaattag cactgcagtg gttcagaggt cagctaccat
                                                                     2460
tggcagttet ecagttetet atagecagte agetataget acaggteace aggeageagg
                                                                     2520
gattggaaac caggcaacag gaattggaca tcagacaata ccagttagcc ttccagcagc
                                                                     2580
aggaatgggt catcaggcca gaggaatgag cctgcagtca aattaccttg gactagcggc
                                                                     2640
agcacctgca attatgagtt atgcagaatg ttctgtccca attggagtga ctgctcctc
                                                                     2700
attgcagcca gttcaggccc gaggtgctgt gcctaccgct accattatag aaccaccacc
                                                                     2760
accacctect cetectecte etceaceace accagetece aaaatgeeac cacetgaaaa
                                                                     2820
gacaaaaaaa ggaaggaaag acaaggcaaa gaagagtaag accaaaatgc catctttggt
                                                                     2880
aaaaaagtgg cagagtatcc agcgtgagtt agatgaagag gacaattcta gttccagtga
                                                                     2940
agaggatcgg gaatcaactg cacagaagcg aattgaagag tggaaacagc agcagctggt
                                                                     3000
tagtggcatg gcagagaga atgctaattt tgaagccctt cctgaggatt ggagagcaag
                                                                     3060
gctgaagaga aggaaaatgg ctccaaacac atagttttta agtttttaaa acttttttgt
                                                                     3120
attattgttt gttttgtgtt cagttcaaag tcttaaccag ttttattgtc aaataaacta
                                                                     3180
taaatgttat gggggagatc ttataaattt cctgggcaag agtgtatgca tacaaagttt
                                                                     3240
tcacttttgt gaaatgtaat ttttctgttt ttgcaaaggg atgaggtgat tggaattqct
                                                                     3300
ttgaccatgc tgcctttatt ctcaaactgg caaacttagc atgttaggtg tattaacctc
                                                                     3360
atcagtcttg aagaacatgt ggctcatgag tataacactt ctgtagagga ctccctgaca
                                                                     3420
aaagtgaaga attaacttct cctccagaac aagtgcaatt cagaaggcag ctctgcattc
                                                                     3480
taccttgctt gactggaatt gtctgaagct ttttctggcc tcttttctct agtcggccac
                                                                     3540
ccctgaagtg ctgaggtcta agtggtttac ctcgtgctga tagatggcca cactctttag
                                                                     3600
agtagttete ataagtteta gaactggtag eteggtegtt tegeacaeta ggtggeatae
                                                                     3660
aggcagcagc aggtgttcat atccttgatt ttgagaattt cccctcaagt atgtggcagt
                                                                     3720
aaatacaaca agacactcta tgtattaatg tctccattgt cttaaccctg ttccaaaaca
                                                                     3780
aaattcacct cctttcttta tgtgaatgta ttctccataa aattccagta tttaaaaagc
                                                                     3840
agtttactgt tctgtacttt ctgttgtatc acaatcaggt aaaagtcact ttaaactgag
                                                                     3900
gaaacggcaa attgtgtttt aaagctcttt gtatttctcc agtttctgac cttgtaaatt
                                                                     3960
```

```
tgtatatatg cactaataaa gctttttta taatcctgat gggttatcct tttgctcgtc
                                                                    4020
aactcctgtt attctgatta tgtaaccagg acttgttttt ttttctaagc atatacaatg
                                                                    4080
caaggggcaa acatttaaca acagctttca agaaaatgag caggagaatc attgaaccca
                                                                    4140
ggaggcggag gttgtggtgg gccaatatca caccattgca ctccaacctg ggcaacaaga
                                                                    4200
gcaagagtcc atctaaaaaa agagctgtat ataccacttt aatctgtcct tgggcttcag
                                                                    4260
acttaaatat tctcttaaac agcaaaaata ctaactaagt taaatttaaa agcaaggaga
                                                                    4320
agcatcattg taatacgaca tccatgtgta ttcaaactag aattttctqa tqqtcttcqt
                                                                    4380
aagataaagg agataattgt catttctatg acacagcttt tataatttga ataaacttag
                                                                    4440
ttggagattg gagtattttt attatttatt ttcatgtgag atgggtaatg tgctgacctc
                                                                    4500
ataacaaagt ttgagggaga cacattgtat gtgagaattt gaagtgctta tqaaqtacaa
                                                                    4560
aagcagaggc caggtgctca catctgtaat cccagcactt tgggaggcca aggcacacag
                                                                    4620
atcacttgag gtcaggagtt tgagaccagc ctggccaaca tggcgaaaac ccctctctta
                                                                    4680
ctaaaaatac aaaaattagc tggatgtggt ggtgtgggcc tgtaatccca gctactcqcq
                                                                    4740
aggetgagge aggagaateg ettgaacetg geaggeagag gttgeggtga geeaagattg
                                                                    4800
cgtcactgca ctccggcgtg gacaagagag tgagactccg tcacaaaaaa aaaaa
                                                                    4855
```

```
<210> 6310
<211> 6302
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6303)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (113)...(3050)
<223> similar to gi3043658 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6310 tetggaatte eegggtegae gatttegtet eggeegegge tetgtgeeet tgetgetgag 60 ggccacttcc tgggtcattc ctggaccggg agccgggctg gggctcacac gggggctgcc 120 cgcgtggccg tctcggcgcc tgcgtgacct ccccgccggc gggatgtggc gactacgtcg 180 ggccgctgtg gcctgtgagg tctgccagtc tttagtgaaa cacagctctg gaataaaagg 240 aagtttacca ctacaaaaac tacatctggt ttcacgaagc atttatcatt cacatcatcc 300 taccttaaag cttcaacgac cccaattaag gacatccttt cagcagttct cttctctgac 360 aaaccttect ttacgtaaac tgaaattete tecaattaaa tatggetaec ageetegeag 420 gaatttttgg ccagcaagat tagctacgag actcttaaaa cttcgctatc tcatactagg 480 atcggctgtt gggggtggct acacagccaa aaagactttt gatcagtgga aagatatgat 540 accggacctt agtgaatata aatggattgt gcctgacatt gtgtgggaaa ttgatgagta 600 tatcgatttt gagaaaatta gaaaagccct tcctagttca gaagaccttg taaagttagc 660 accagacttt gacaagattg ttgaaagcct tagcttattg aaggactttt ttacctcagg 720 ttctccggaa gaaacggcgt ttagagcaac agatcgtgga tctgaaagtg acaagcattt 780 tagaaaggtg tcagacaaag agaaaattga ccaacttcag gaagaacttc tgcacactca 840 gttgaagtat cagagaatct tggaacgatt agaaaaggag aacaaagaat tgagaaaatt 900 agtattgcag aaagatgaca aaggcattcc attcatagaa agcttaagga aatctttgat 960 tgacatgtat tctgaagttc ttgatgttct ctctgattat gatgccagtt ataatacgca 1020

```
agatcatctg ccacgggttg ttgtggttgg agatcagagt gctggaaaga ctagtgtgtt
                                                                     1080
ggaaatgatt gcccaagctc gaatattccc aagaggatct ggggagatga tgacacgttc
                                                                     1140
                                                                     1200
tecagttaag gtgactetga gtgaaggtee teaceatgtg geeetattta aagatagtte
tegggagttt gatettaeca aagaagaaga tettgeagea ttaagaeatg aaatagaaet
                                                                     1260
tcgaatgagg aaaaatgtga aagaaggctg taccgttagc cctgagacca tatccttaaa
                                                                     1320
tgtaaaaggc cctggactac agaggatggt gcttgttgac ttaccaggtg tgattaatac
                                                                     1380
tgtgacatca ggcatggctc ctgacacaaa ggaaactatt ttcagtatca gcaaagctta
                                                                     1440
catgcaggat cctaatgcca tcatactgtg tattcaagat ggatctgtgg atgctgaacg
                                                                     1500
cagtattgtt acagacttgg tcagtcaaat ggaccctcat ggaaggagaa ccatattcgt
                                                                     1560
tttgaccaaa gtagacctgg cagagaaaaa tgtagccagt ccaagcagga ttcagcagat
                                                                     1620
aattgaagga aagctcttcc caatgaaagc tttaggttat tttgctgttg taacaggaaa
                                                                     1680
agggaacagc tctgaaagca ttgaagctat aagagaatat gaagaagagt tttttcagaa
                                                                     1740
ttcaaagctc ctaaagacaa gcatgctaaa ggcacaccaa gtgactacaa gaaatttaag
                                                                     1800
ccttgcagta tcagactgct tttggaaaat ggtacgagag tctgttgaac aacaggctga
                                                                     1860
tagtttcaaa gcaacacgtt ttaaccttga aactgaatgg aagaataact atcctcgcct
                                                                     1920
gcgggaactt gaccggaatg aactatttga aaaagctaaa aatgaaatcc ttgatgaagt
                                                                     1980
tatcagtctg agccaggtta caccaaaaca ttgggaggaa atccttcaac aatctttgtg
                                                                     2040
ggaaagagta tcaactcatg tgattgaaaa catctacctt ccagctgcgc agaccatgaa
                                                                     2100
ttcaggaact tttaacacca cagtggatat caagcttaaa cagtggactg ataaacaact
                                                                     2160
tcctaataaa gcagtagagg ttgcttggga gaccctacaa gaagaatttt cccgctttat
                                                                     2220
gacagaaccg aaagggaaag agcatgatga catatttgat aaacttaaag aggccgttaa
                                                                     2280
ggaagaaagt attaaacgac acaagtggaa tgactttgcg gaggacagct tgagggttat
                                                                     2340
tcaacacaat gctttggaag accgatccat atctgataaa cagcaatggg atgcagctat
                                                                     2400
ttattttatg gaagaggctc tgcaggctcg tctcaaggat actgaaaatg caattgaaaa
                                                                     2460
catggtgggt ccagacctgg aaaaagaggt ggttatactg gaagaatcgg acccaagaac
                                                                     2520
agtgtgttca caatgaaacc aagaatgaat tggagaagat gttgaaatgt aatgaggagc
                                                                     2580
acccagetta tettgeaagt gatgaaataa eeacagteeg gaagaacett gaateeegag
                                                                     2640
gagtagaagt agatccaagc ttgattaagg atacttggca tcaagtttat agaagacatt
                                                                     2700
ttttaaaaac agctctaaac cattgtaacc tttgtcgaag aggtttttat tactaccaaa
                                                                     2760
ggcattttgt agattctgag ttggaatgca atgatgtggt cttgttttgg cgtatacagc
                                                                     2820
gcatgcttgc tatcaccgca aatactttaa ggcaacaact tacaaatact gaagttaggc
                                                                     2880
gattagagaa aaatgttaaa gaggtattgg aagattttgc tgaagatggt gagaagaaga
                                                                     2940
ttaaattgct tactggtaaa cgcgttcaac tggcggaaga cctcaagaaa gttagagaaa
                                                                     3000
ttcaagaaaa acttgatgct ttcattgaag ctcttcatca ggagaaataa attaaaatcq
                                                                     3060
tactcataat cagctctgca tacatctgaa gaacaaaaac atcaacgtct tttgtccagc
                                                                     3120
ctctttttct tctgctgttc cacctttcta aacatacaat aaagtcatgg gataaaaata
                                                                     3180
atcgatgtat gttacgggcg ctttaaccat cagctgcctc tcgaatggaa gaacagtggt
                                                                     3240
aatggattaa catcctattt tgttgtacta aagtgacaaa tcggaataat ataattggta
                                                                     3300
tggccattag gttcagtcct tgaagataag aaacttgttc tctgtttgtt gtcttatttg
                                                                     3360
tggtggcact cgtttaatgg attaactgag gttgctcaat gttcagtttc ttttccagaa
                                                                     3420
atacaatgct aggtgttttg aaataaaact tatatagcaa ttgtttaaag ttatcaattg
                                                                     3480
tatataaaat cacagtagee tgetaaatea ttgtatgtgt etgtagtatt etatteecag
                                                                     3540
aaactatttg accatgataa ttcagtttat attcaccaca tgaaagaaaa atgggtaaca
                                                                     3600
gaagaacccc taaaacaggt taatttggat tgtaacgttc agtgaaagaa atttcaaccc
                                                                     3660
ttcatagcca gcgaagaaat ttgccttgga agccaagtca gtaccagctt acctatttga
                                                                     3720
ttcagttgct gttttctcac tctctatatc catttgaaat tgatttattt tagatgttgt
                                                                     3780
atacttacgt taggetttet gttaatagtg gtttttetee tgttgacaga gccaccggat
                                                                     3840
tatgacacag gatgaggaag attaaggata atcaattgac taatttcatt tagaatatta
                                                                     3900
tcaaacattt caactaggta tcagaaaaag gctttctttc ataagactat tttaaataga
                                                                     3960
aattatttca acaattaaag taatgttgac catcccctg gcagctgaat aaagaaaaat
                                                                     4020
ttagttcaat ttattgcaat ttaattacaa tactaccttc acaacatttt catgtgtttt
                                                                     4080
aaataaatat tttttaattg gctaaaggac attcaagcaa agaaatgctt tctttactta
                                                                     4140
aaatgtctat ctcatttgct gccttttcac taagccttta ctttgttaat aaaagtgtcc
                                                                     4200
attgtgtgat gtttttgatt ttacagtttg ctaaatctta ttttcttgga gttgcttttt
                                                                     4260
ggtaacagcc ccattgctac tccccatttt attgttttac atcaatgcat gcttcgttgt
                                                                     4320
gatccctcaa gatgtaacac ttggtatgct cggttgagga tatgaaaaaa tacttccgaa
                                                                     4380
accaggaatt caatgtatgt ttgttttata ctgtttgata agaaaagtag gtccagcctt
                                                                     4440
```

```
aagcagcaca gatgcgctgg tagatgcata gtcaggaact ttttttattt cttttaggtc
                                                                   4500
tagggacagg agtgaataga aagggaggag agctctatta tgttctatac acagattagg
                                                                   4560
agatgacett actgggtaca eccetetaae cagtgettae aggttaatge atgttaatga
                                                                   4620
atatttttgc agttgtaaag cataacaatt acaactacac atctatttct aaaqaataaa
                                                                   4680
acaggaccat atttatttac ttctgtcaac tatagaaaga aagaccttca gctgtatttc
                                                                   4740
cacagatttc tcccaaggaa aaggctaata ttagtcacta ctqttatcac atccctttqt
                                                                   4800
ataagtttta aaaagagatg gagggagatc ttcatttctt tgaggagatc agtattgtaa
                                                                   4860
cgtatgtgaa tagatgataa caattaatat tactaaaagt cccacatgag agtcctgacg
                                                                   4920
coctctccaa tgccccacag taatgtgggc ttctttcatq qqtttttttt tcttctttt
                                                                   4980
agctgatctc atcctaagca tgctttattt ttccttgaaa gctaggtatt tatcaactgc
                                                                   5040
agatgttatt gaaagaaaat aaaattcagt ctcaagagta aaccctgtgt cttqtqtctq
                                                                   5100
tagttcaaaa gtcagaaatg attctaattt aaacaaaaag atattaaata tacagaagtt
                                                                   5160
5220
gacaaagctc tgtatggaag actgaacaac tgtaaataga tgatatccaa acttaatttq
                                                                   5280
gctaggactt caattttaaa aatcagtgta cctaggcagt gcacagcacg aaataagtgg
                                                                   5340
cccttgcagc ttccccgttt aacccactgt gctatagttg cgggtggaac aqtcaacctt
                                                                   5400
totagtagtt tatgatattg coctetttgt atteccattt tetacagttt tttccqcaqa
                                                                   5460
cttctttctg caaattattc agcctccaaa tgcaaatgaa tgatataaaa ataagtaggg
                                                                   5520
aaccatggca aagagtggtg cttcccaccc tcccaatgtg qqaatttqac qataqqatqa
                                                                   5580
gagtcagagt ataggtttaa aagataaaat ctttagttaa taattttgta tttatttatt
                                                                   5640
ctagatgtat gtatctgagg aaagaaatct ggtatttttg ctttccaata aaagaggggg
                                                                   5700
gggngggngg gaatttccaa aagtaatggt ttttctctca gttctctaag ctqqtcctat
                                                                   5760
gttatagccc tagcagtatg gaaatgtgcc tttaaaatat gccttacctt ttgaatgatc
                                                                   5820
atggctatat gttgttgaga tatttgaaac ttaccttggt tttcacttgt gcactgtgaa
                                                                   5880
tgaactttgt attattttt taaaaccttc acattacgtg tagatattat tgcaacttat
                                                                   5940
attttgcctg tgcttgatca aaggtcattt gtgtagatga gtaattaaaa aatatttaaa
                                                                   6000
tcacattata attctattat tggagagcat cttttaaatt tttttctgtt ttaacgaggg
                                                                   6060
aaagagaaac ctgtatacct agggtcatta tttgacccca tagtataacc agattcatgg
                                                                   6120
tctaacaagc tctcagtgtg gcttttctct gaatgcttga atttcacatg ccttgcattt
                                                                   6180
cacagttgta ctccatggtc aaccggtgct ttttttcaca tcqtqqtact tqtcaaaaca
                                                                   6240
ttttgttatt ttccttggta aaatatataa aaaaggtttt cttaattttc aaaaaaaaa
                                                                   6300
aa
                                                                   6302
```

```
<210> 6311
<211> 1998
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1752)
<223> similar to gi6013191 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6311

tttcgtggcg gtggctgggg cggtgtccgg ggagccgctg gtgcactggt gcacccagca 60
gttgcggaag actttcggcc tggatgtcag cgaggagatc attcagtacg ttttgtcaat 120
tgagagtgct gaagagatac gagaatatgt tactgatctc ctccagggaa atgaaggcaa 180
aaaaggtcaa ttcatagaag aacttataac caaatggcaa aagaatgatc aggagttgat 240
ttcggatcct ttgcagcagt gcttcaaaaa agatgaaatt ttagatggc agaaatcagg 300
```

```
cgaccatcta aagcggggta ggaagaaagg gagaaacaga caggaagttc ctgcatttac
                                                                     360
tgaacctgac acgactgcag aggttaaaac accttttgat ttggccaagg cacaagagaa
                                                                     420
cagcaactcc gtaaagaaga agacaaagtt tgtcaattta tacacaaqaq agggacagga
                                                                     480
caggettgea gteetgetee etggtegtea eeettgtgat tgeetgggee agaageacaa
                                                                     540
gctcatcaat aactgtctga tctgtgggcg cattgtctgt gaacaagaag gctcaggccc
                                                                     600
ttgcttattc tgtggcactc tggtgtgtac tcatgaggaa caagatattt tacggggga
                                                                     660
ctcaaaccaa gagccagaaa ctgctaaaga aactcatgtc aggagtggag aattctggaa
                                                                     720
aggtggacat ctctaccaag gaccttcttc ctcatcaaga attgcgaatt aagtctggtc
                                                                     780
tggagaaggc tatcaagcat aaagacaaac tgttaqagtt tqacaqaact aqtattcqaa
                                                                     840
ggacccaagt cattgatgat gagtcagatt actttgccag tgattctaac caatggttgt
                                                                     900
ccaaacttga gcgggaaacc ttgcagaagc gagaggagga gctgagagaa cttcgacacg
                                                                     960
cctctcgact ttctaagaag gtcactattg actttgcagg aaggaagatc ctggaagaag
                                                                    1020
aaaattcact agcagagtat catagcagac tagatgagac aatacaggcc attgccaatg
                                                                    1080
gaaccttgaa ccagccactg accaaattgg atagatcttc tgaagagcct ttgggagttc
                                                                    1140
tggtaaatcc caacatgtac cagtcccctc cccagtgggt tgaccacaca qqtqcaqcct
                                                                    1200
cacagaagaa ggctttccgt tcttcaggat ttggactaga gttcaactca tttcagcacc
                                                                    1260
agttgcgaat ccaggatcaa gaatttcagg aaggctttga tqqtqqctqq tqcctctctq
                                                                    1320
tacatcagcc ctgggcttct ctgcttgtca gagggattaa aagggtggag ggcagatcct
                                                                    1380
ggtacacccc ccacagagga cgactttgga tagcagccac agctaaaaaa ccctccctc
                                                                    1440
aagaagtete agaactecag getacatate gtettetteg tgggaaagat qtqqaattte
                                                                    1500
ctaatgacta tccgtcaggt tgtcttctgg gctgtgtgga cctaattgac tgcttgtccc
                                                                    1560
agaagcaatt taaggagcag tttccagaca tcagtcaaga atctgattct ccatttgttt
                                                                    1620
tcatctgcaa aaatcctcag gaaatggttg tgaagtttcc tattaaagga aatccaaaaa
                                                                    1680
tctggaaatt ggattccaag atccatcaag gagcaaagaa ggggttaatg aagcagaata
                                                                    1740
aagctgtctg acccaggaga aaaggaacta tacagcatag tggagttttg tgtactaaaa
                                                                    1800
ttgctatcta ctggtccttt ggaattgaag tagtagaaac ctaaaggctt ggcgtcaggc
                                                                    1860
ttgaatatct cagaacttaa actcttacca aaatctgtat atttttctta aggagtggga
                                                                    1920
ttcctacttt atgtaatggg gtcgaaatct ttgaacacat tatttataaa aacctgttta
                                                                    1980
aaaattctaa aaaaaaaa
                                                                    1998
```

```
<210> 6312
<211> 4951
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4861)...(549)
<223> similar to gi5419846 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6312
ttttttttt ttaaaggtga aacattttta tttagtttca ttacagaggt taaatagact
                                                                       60
tttatgacat ccatacaaaa tatagcaatg gttgtgggca taaataagaa ttgttctaac
                                                                      120
tattctaact gattttataa tgcacagctc tttcagttga ttacaaatat gaagtatatc
                                                                      180
acctcaggat gcagagattt ttgaattcta tttagcaatt tccaaaagct gaagtctaga
                                                                      240
accgaagaca catataaaaa gatgattttt aaatggaacc agccaccttg aaaaatattt
                                                                      300
tgaaaaacat gatttaaact ttagaaaata aaacttttaa tacttaagag ataacatgat
                                                                      360
gcaaacgttg cttgttggcc tgactttcca ggactaagac cctctgggaa tcaatggggc
                                                                      420
tcggtgacat ggcgtaacct gctactgggg tgtggtctca gacacaaaat cacactggat
                                                                      480
```

```
gttggtctac agaggcagga ttctctcatt gctggatgac tcttgaaatg aagcctttgc
                                                                      540
ctttgttaca catttggctt tacaatcttc attgacaaat agttcggcaa agagtagagg
                                                                      600
agcacggcca cgaagagcag caggataagc aggaacagca agccgatgat gacccactta
                                                                      660
aagcggcgcc acacgatgaa cttcatggtc ttgcatgggt tggtgaacca gaggaaggag
                                                                      720
gtttctggtc gatttggtaa gtccagcttg gggttcatgt tgggttcgtc ccgcccttc
                                                                      780
eeggetggee tetegtegge etectteteg ttgaggattt ecaatgteat etecaettte
                                                                      840
ccagccatta cgcgggcgcc atctttctct gcgtagcatg gccaccatcc tttcatggac
                                                                      900
ttctgctcaa agagggaggc tgtcttggct ttaagggggt tcatggcttt gaggtccqqa
                                                                      960
atcatgtcca aaccetgcaa ttteeteetg gtgatttttg caggaaatga atcgtgtgae
                                                                     1020
ggcaagtcaa agttctagga aaacccaagt agtcatccag aggaaaactt gtcattgtcc
                                                                     1080
ccatatctga atgatcagcc ctgggtggga ttcgaaattc cgtttggtca atactccaga
                                                                     1140
aatgctcttt tttcgcaacg atacagagtt gttcggctgg aaggtagtca aacgggaaaa
                                                                     1200
caaatcgcca gttaaaattc ccttcaccat ccaaagatct gtaatggaca tctgttttct
                                                                     1260
gtttgttttc ttcattgcca ggaatccagc ctttgacgta gatgtcactc atttcctctc
                                                                     1320
ctgtgatgct tttctcgtcc aagataacgt ccttggtgtt ccagatgatc acacgcaggt
                                                                     1380
agtatctggg aaatgttggg ctggaaggtg ctgtgcaaag tccttgtttc cacgtgctca
                                                                     1440
gggaccagcc cctgagtcct gaggatgtga agagcaagcc gctcttcagg ggccccgagg
                                                                     1500
tgctggtgca ggattttgtt ggcttcaaat tcatccaagc tgtagtctcg tcctccatat
                                                                     1560
ctgattctac tcccatcttc ggaaaggatg ggttgtggga agcctttgaa tctggcgaca
                                                                     1620
ttttgaagca gcttgtgttg gtcctcagtg aatctcgcca ggtattgact ccagaaacac
                                                                     1680
agtactcctc tggtatcccc gcagtgggac cccaaagcgg gaaagggaat gggttttcca
                                                                     1740
gatcaataat tgtttctcct actttttcat cccgggtaaa ggtgtcataa tcatagacag
                                                                     1800
aaattttcag gtctttttct tgaggtaagt agcagctcag ttcgtacatc ctgccaaaga
                                                                     1860
ctgggttgag agtgttggga atgtagtgat ctcggtcttt caatgacttt tttgcccagt
                                                                     1920
gttattttta tgtaagggtc acacaggcca ttgttgtcct ggggctggag ctctaagcct
                                                                     1980
cgaacaatgt aaatcctaac cgtgcattcc tgtgggacgc tgtcaggtaa ttcccgaaac
                                                                     2040
tgtctgggag gggctggcac gctggggtca tccggcagag ggtagatccg aaaggagccc
                                                                     2100
ttaaactctc caaccacaga aggatcttca ttttcatccg acttgcctcg gtacaacttg
                                                                     2160
aacgtatctg agaagtctgt caggccctca aattctgcta cattttctag ttcgcaatta
                                                                     2220
tatatettga gettggaata geetttetga atatactgte egeattttte atgtteeeet
                                                                     2280
gaggaggcat aaaatttact ccaccagtcc acgatttctt cctccttttc tgtcagatgc
                                                                     2340
actgtcgctg gagaagccat tttgctgagt gctgttgaca tactgcttaa gcacttagaa
                                                                     2400
gccagtaatg gtttggtgtc ttccatttcg ataacgatgt cccggcatgg tggggcagac
                                                                     2460
agaagggagg ctttgagctg tgggacgatg tcctctttcc ctgcataagg gtcacagcga
                                                                     2520
aagcgatcca ggcgctcgat ggtgcactgg cctacgacag gcttccgccc aaactgcctg
                                                                     2580
tggtcgatga ccttgatcac cagtgggggc atgtacaatt cctccttggg caagaacact
                                                                     2640
ttcatgaaga gaacagaact tggaaagttg ggtgtcttct taaggttttt gatcaccacc
                                                                     2700
gattccaccc tttctcctcc acactccaca acaagactgg gggatgtgat agaagccatc
                                                                     2760
tggaagtttt tcatatttct taagccccaa gctagaatct caatggcagt gagctggacc
                                                                     2820
acaggcctga tcccctgggg gaccatgtat agatttggcg ccctttgagg gggaagaatg
                                                                     2880
ggaaggttgg agccatcctt gcccctcaga atcagctctg cagttacaag aacatccccg
                                                                     2940
caggetttgt etecatteat taetgggtge cagagaagtt tgggtgtgat gtecatttet
                                                                     3000
gagttcagtt tcaccacagg agagaaaatg cttcgtccta aaaattcatc tttgcccact
                                                                     3060
tggtcattgt caaaaagttc catgataact ttgggtggat tctgtagaac tgtttggggt
                                                                     3120
tccccataga tttcaacttc atcgaatata attgtttggt cccacgtggg attcagggtt
                                                                     3180
gaatggatga teteagtggt tttgeteega tggaggaaac agatatgage atatggatet
                                                                     3240
gaaaagctat ccttatctaa agccaagagg tttctggctt gatagacata gcagcgcaga
                                                                     3300
tggtagatgt agtctctgtc aaaattgcag gaaacaatgg gggtgtttgc tccgaacaca
                                                                     3360
gtggtggcac tgtgcttctg tttctccagg ctcttctcat ccccatcttc ggtagtgtct
                                                                     3420
gccccaaggg caccttcaag tttaaagatg gcagctgcac catgtgtttc tgaaggagcc
                                                                     3480
atttttctcc tccagcgtct gcggcggaag gtatctgaac tacgttgttt ccagtgaaat
                                                                     3540
ttccagccaa ttagagaagc atattcccag ccctcttggt cttgcaattc ctccatggcc
                                                                     3600
cctgcggtgc ttgaagcagt ctgtgttaaa tctttcttgc gttttcggac cagccttcgc
                                                                     3660
cgtctatgag tgtggtacat tttctctgct gcaacccagg atttgggctt atgatcagga
                                                                     3720
ggaatggtga ttccatattc ccagcetttc tcatccaccg ctcgatttat gtcataagac
                                                                     3780
catgcatcat cttcccattc ccaacctgga ggacaagtca actcgctggg tgatgctgct
                                                                     3840
ttatcgccgt tcgcatccgt gtaggtgtcc tcggccggct tccagtcgcc cccggggtag
                                                                     3900
```

```
eggetetegt tetgatagae tteateagtg aacteegtgt gacetgeate tgeeteagte
                                                                     3960
agcaagette ttteaggate aactateeae teteetteee atteecaqee ttttqqaqqe
                                                                     4020
agaaaaaatt ccctcttgag ttttattttt cctgtgacat cagaaaactt atgacgtcct
                                                                     4080
actaatccag aagtacccca ttttccaaac atgagagctt gattttcata catttcagca
                                                                     4140
aagacggtga aagtteette tgcgaagetg ttaaacttet tetecacage acttaageet
                                                                     4200
agccagatgt tcactcgcaa ctccacaggc acctttggcc cgttgttttt ctcctgtgga
                                                                     4260
tacttcagaa agatggtttg ggttttccca cagtattttc cagatgcatt ctcaccactq
                                                                     4320
gtggagtaca agacctgatg tgcgggaatt cgtgcatagg ccagtctctt ctctccccgg
                                                                     4380
atcatccaga tgatgatgtc aggcatgctg ttctgtggct cttcagtcag ctgcattaat
                                                                     4440
ttatcaagcc agtcctcaat ttctgccagt gtggacttca catctgtggc ttccgacctc
                                                                     4500
atcctcacag ccgcctcatg tatttgggag agagacctgg accgcagctt tcggatctga
                                                                     4560
gtatcgagaa ctgtgacgtt ggcttttcct tctgtgagag gcaacgtgta tctcgtgtct
                                                                     4620
tetataaett catetateag etteageeac aatteageea getggtttge aggaatttta
                                                                     4680
ccttgtatcc ctgattttag agcttctata tttgtttgca gccgttctgc catagctagg
                                                                     4740
agagtgttca ccgcatccag gcgatgacta atatcctccc agtatgaagt cagggtaaca
                                                                     4800
actggcttgg tgtgggccca aggcaagtaa taatagtagt tgccatcaaa tacaqcacqq
                                                                     4860
ctgtactgag ttgttgatgc caaaggctta caggtggtgt caaacttgtt gccatagttc
                                                                     4920
ccaatgctga cttcaaactg aatggcctca c
                                                                     4951
```

```
<210> 6313
<211> 2157
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (173)...(1329)
<223> similar to gi37643 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6313 cgcttgggta gaggaagccg tgaggccgga gcttaggtcg ggaagggatg gatcgctgag 60 ccgatagcgt ccgctaggct gtctgcctcg gtacctgtta ctgctgctac ttcctcgttt 120 gacaccttcc tggaatctct cttgattttt gaggaaatac ctagtaacaa acatgactga 180 gttctggctt atatctgctc ctggggagaa aacctgtcag caaacatggg agaaattgca 240 tgcggcaact tcaaagaaca ataatcttgc tgtcacttcc aagttcaata ttcctgactt 300 aaaggttggc acgttggatg tcttggttgg cttgtcagat gaactggcta aactggatgc 360 atttgtagaa ggagtggtta agaaagtagc tcaatacatg gctgatgtat tggaagatag 420 caaagacaaa gttcaagaga atctgttggc ttaatgggag tggacttggg ttaccttata 480 taaccaaggt teccagtggg gacatggeca aatatecaat caagcagtee etgaaaaata 540 tttctgaaat aattgccaag ggagtaactc agattgataa tgacctgaaa tctcgagcat 600 ctgcatacaa taacctgaaa ggaaatcttc agaatttgga acgaaagaat gcaggaagtt 660 tgctaactag aagtctagca gaaattgtga agaaggatga ctttgttctt gattcagagt 720 atctcgtcac attactggta gtagttccca agttaaacca caacgactgg attaagcagt 780 atgaaacact agccgaaatg gtagttccaa ggtctagcaa tgttctttca gaggaccaag 840 acagttacct gtgtaatgtc accttgttta ggaaggcagt tgatgacttc agacacaaag 900 ccagagaaaa caaattcatt gttcgtgact tccagtataa tgaagaggag atgaaagcag 960 ataaagaaga aatgaacagg ctttctactg ataagaaaaa acaatttgga ccacttgtac 1020 ggtggctgaa agtgaatttt agtgaagcat ttattgcatg gattcacgtg aaagcattac 1080 gggttttcgt tgagtctgtt ttaaggtatg gcttgccagt gaacttccaa gcaatgctac 1140

```
ttcagcccaa taagaaaact ttgaagaaac tgagagaagt attacatgaa ttgtataaac
                                                                    1200
atctagacag cagtgcagca gctattattg atgctcctat ggatattcca gqtttaaacc
                                                                    1260
tgagtcaaca agaatactac coctatgtgt actacaagat tgattgcaac ttgctggaat
                                                                    1320
tcaagtgaaa atgggctcct cccccgacaa tcctgtcctt gtgtttgtgt gtgctaacag
                                                                    1380
aaataagttg cagtatggtc gtacttttaa ctctaqtatc ctttqcttqc ttcttacccc
                                                                    1440
ctttcctagg tgaattctcc cacagtggtc tgtatctcaa cattttcttt ttaaaggaaa
                                                                    1500
aaatatatat atatagtttc tttttattga tcaggtctgt aaatgtgtac taaaaaaatc
                                                                    1560
agagtttatt tataaacaaa atagtttatt taaagagaag gtctcttcct tattgatatc
                                                                    1620
atggtatgca ttaattccat ttgttactat tgtgcacaaa aqccctqttc acaqqqqaat
                                                                    1680
ggtgtaaaca tttatactgt tttgttcact gtatttagta gacataactg ttgaatagtt
                                                                    1740
actgaatcat gatgtaaaga atatgtgacc atcttcaggt atgggatttc tgaacgtttc
                                                                    1800
aaatttcaat caatgagcac tgtcaacacc cacaggagag aataaaatta cctgtgcaaa
                                                                    1860
ggtgtattgt ggtgtgtat acttaagagt acagggctgt ttgagagttg agtgatgtca
                                                                    1920
tgggtcaggt ggtatgctgc ttgcaggatt ttgttatgtg ctgaggggta cccatttqtq
                                                                    1980
ttgtctgact ttcgtatgat ttaattgagc caaatttggg tcagaacaca aatttgaaga
                                                                    2040
tgacttttca gtatatgatg ggtatttaca tttgaacact agaattttag gtctctcaaa
                                                                    2100
taattaagaa tagagccagt tttgaataaa gtctagcaga actatgaaaa aaaaaaa
                                                                    2157
```

```
<210> 6314
<211> 1532
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (884)...(671)
<223> similar to gi710336 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6314
ttttttttt ttctcattgt aacactcgtt tttatataaa tattcgcaag tcatgttaca
                                                                       60
gaagaageee caccagggaa aaaagteaae gttagggttt tgttagattg acceetgeet
                                                                      120
tctaggttgg gccccagcct ggaggcgcct gctgctttgg gaaggctggg gttgctgccg
                                                                      180
tgaggctgcc gaagaagctg cctgtgtcgc ccacccctgg gccgaccccc ttctttggtg
                                                                      240
tgtggtacat ggtgaccttc tctggccacc cttagcctgg gggagggttt tggagaacag
                                                                      300
ggttcaggga agcagggccc aggagtcctg ggggcacttg gaaatggggt gaaggggact
                                                                      360
gagccattaa gaggtggtgg agtctgagat ttagaggctg agcctttggg ggtggggca
                                                                      420
gagtgaacgg gaacatgttg ggggaaccgg ggctgtcagc caagtaggaa gcttctgccc
                                                                      480
ttccctccag cccaggtccc caggtcctgc cccctgttgg tcatctcctg ctggcccac
                                                                      540
cttcccaggg agaagcctga ctgtcccttc ccggctcttc cccctgcagt cccctttccc
                                                                      600
cacagagagg ccagaggcta ggaacacagc accagtctga gggtttaatt aaccaggaag
                                                                      660
ggaactgttg ggaggggcac ccctgtaaaa atgtacaaaa ggtcttgggg ctatgtgaaa
                                                                      720
ggggtgataa atatgtacat ggaacccccc ttccttgagc ccctcctccc ccagccctcg
                                                                      780
gagggcatga ggacttgggt ggtaggtgaa cgggagggg cactttggcc tctggcttag
                                                                      840
tgagccettg gggaggcagg cccagggcet agaggceett acaggggcaa aggtgtacet
                                                                      900
caggaggece catggecece gagatgagee acaeteceat geacaegece etetecette
                                                                      960
tctagaggct gtgacctctg ctctcccagt gaccctacac tccatgtgat gcttggtctt
                                                                     1020
gtgggggttg aggettetgt teccaggtte catgacetea gaggtggetg gtgaggttat
                                                                    1080
gacctttgcc ctccagccct ggcttaaaac ctcagcccta ggacctggtt aaaggaaggg
                                                                    1140
gagatggage tttgccccga ccccccccg ttcccctcac ctgtcagccc gagctgggcc
                                                                    1200
```

```
agggcccta ggtggggaac tgggccggg ggcgggcaca agcggaggtg gtgccccaa 1260
aagggctcc ggtggggtct tgctgagaag gtgaggggtt cccggggccg cagcaggtgg 1320
tggtggagga gccaagcggc tgtagagcaa gggtgagca ggttccagac cgtagaggcg 1380
ggcagcggcc acggcccgg gtccagttag ctcctcaccc gcctcataga agcggggtgg 1440
ccttgccagg cgtggggtg ctgccaacca ggttggctcc aggaagccag cacagcgatc 1500
tggtgggcta gggcccagaa acgggggcg cc 1532
```

```
<210> 6315
<211> 3092
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (626)...(2702)
<223> similar to gi4704739 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6315

```
cggacgcgtg gggtaagaga aaggggaagg ggaggtggga gaggcacctc aactttgatg
                                                                  60
tecegageet tgagtggeea etegeaaget ggeeaaggge tteacacaat ttgecaagat
                                                                 120
gacagagggg accaagaaga ccagcaaaaa gttcaagttc ttcaagttca agggctttgg
                                                                 180
gagtttctcc aacctccctc ggtccttcac tctgagacga tcctcagctt ccatcagtag
                                                                 240
gcagtcccat ttggagcctg acacctttga agccacgcag gatgacatgg tgacggtgcc
                                                                 300
caagagteee ecageetatg ecegeteeag tgacatgtae ageeacatgg geaceatgee
                                                                 360
tegececage ateaagaaag cacagaaete acaggetgee eggeaggeee aggaggeggg
                                                                 420
teccaageee aacttggtae eeggaggtgt accegaceee eeaggettgg aggeageeaa
                                                                 480
540
ttcagcagtg gaggtagacc ccatcagaaa gcctgaggtc cccacaggag acgtagaaga
                                                                 600
ggagagacct cccagggacg tgcactcaga aagggctgct ggagagccag aggctggcag
                                                                 660
cgactatgtg aagttctcca aggagaagta catcctggac tcatcgccag agaaactcca
                                                                 720
caaggaattg gaggaggagc tcaaactcag cagcacggat ctccgcagcc atgcctggta
                                                                 780
840
catccgggac tcactcacca gcctgggcga ctatgtgctc acgtgccgct ggcgcaacca
                                                                 900
ggccttgcac ttcaagatca acaaggtggt ggtgaaggca ggcgagagct acacacat
                                                                 960
ccagtacctg tttgagcagg agagctttga ccacgtgccc gccctcgtgc gctatcatgt
                                                                1020
gggcagccgc aaggctgtgt cagagcagag tggtgccatc atctactgcc cggtgaaccg
                                                                1080
caccttccca ctgcgctacc tcgaggccag ctatggcctg ggacagggga gtagcaagcc
                                                                1140
tgctagcccc gtcagcccct caggccccaa gggcagccac atgaagcggc gcagcgtcac
                                                                1200
catgaccgat gggctcactg ctgacaaggt cacccgcagc gatggctgcc ccaccagtac
                                                                1260
gtcgctgccc cgccctcggg actccatccg cagctgtgcc ctcagcatgg accagatccc
                                                                1320
agacctgcac tcacccatgt cgcccatctc cgagagccct agctcccctg cctacagcac
                                                                1380
tgtaacccgt gtccatgccg cccctgcagc cccttctgcc acagcattgc ctgcctcccc
                                                                1440
tgtcgcccgc cgttccagtg agccccagct gtgtcccgga agtgccccaa agacccatgg
                                                                1500
ggagtcagac aagggccccc acaccagccc ctcccacacc cttggcaagg cctccccgtc
                                                                1560
accatcactc agcagctaca gtgacccgga ctctggccac tactgccagc tccagcctcc
                                                                1620
cgtgcgtggc agccgagagt gggcagcgac tgagacctcc agccagcagg ccaggagcta
                                                                1680
tggggagagg ctaaaggaac tgtcagaaaa tggggcccct gaaggggact ggggcaagac
                                                                1740
cttcacagtc cccatcgtgg aagtcacttc ttccttcaac ccggccacct tccagtcact
                                                                1800
actgatecce agggataace ggecaetgga ggtgggeett etgegeaagg teaaggaget
                                                                1860
```

```
gctggcagaa gtggatgccc ggacgctggc ccggcatgtc accaaggtgg actgcctggt
                                                                     1920
tgctaggata ctgggcgtta ccaaggagat gcagacccta atgggagtcc qctqgggcat
                                                                     1980
ggaactgete accetecece atggeeegga agetacgeet agacetgegg gaaaggttee
                                                                     2040
acaccatgte cateatgetg geogtggaca teetgggetg caccqqetet qeqqaqqaqe
                                                                     2100
gggcagcgct gctgcacaag accattcagc tggcggccga gctgcggggg actatgggca
                                                                     2160
acatgiticag citicgeggeg gicatgggtg ccctggacat ggcccagatt tctcggctgg
                                                                     2220
agcagacatg ggtgaccctg cggcagcgac acacagaggg tgccatcctg tacgagaaga
                                                                     2280
ageteaagee tttteteaag ageeteaaeg agggeaaaga aggeeegeeg etgageaaea
                                                                     2340
ccacgtttcc tcatgtgctg cccctcatca ccctgctgga gtgtgactcg gccccaccag
                                                                     2400
agggccetga gccetggggc agcacggagc acggcgtgga ggtggtgctg gctcacctqq
                                                                     2460
aggccgcccg cacagtggca caccacggag gcctgtacca caccaatgct gaagtcaagc
                                                                     2520
tgcaggggtt ccaggcccgg ccggagctcc tggaggtgtt cagcacggag ttccagatgc
                                                                     2580
gccttctctg gggcagtcag ggtgccagca gcagccaggc ccggcgctat gagaagttcg
                                                                     2640
acaaggteet caetgeeetg teccaeaage tggaacetge tgteegetee agegagetgt
                                                                     2700
gaccccaggg acatttcccc tctgcagctg cggacagcgt caggggcaga ggggcacaca
                                                                     2760
actiticecca gageacceca aggacactgt gateaacceg agaatgtict qqqttcaact
                                                                     2820
caagcatete cettgeacet ceagggteet gegtggaete tgggtteeat eceacetget
                                                                     2880
acatgctcac caggtctcca ttgaggaaga acaggaacgc cggttccccc accagctttt
                                                                     2940
getgeteece tteetgetgg ggtteeetgt tttegageea tgggaggeag getgeteacg
                                                                     3000
cctcctcact ctctgtctgt ccctcaccaa caccaaggcc tccatctcac tgtaaataag
                                                                     3060
tctcttgttc ttgtaaataa gatgtacaga ag
                                                                     3092
```

```
<210> 6316
<211> 646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (572)...(75)
<223> similar to gi306901 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6316
ttttttttt ttctctttac aacagccttt atttccggcc cttgatcctg ctcggatgct
                                                                       60
ggtggaggcc cttagctccg cccgccaggc tctgtgccgc ctccccgcag gcgcagattc
                                                                      120
atgaacacgg tgctcagggg cttgaggccg tactccccca gcgggagctg accttcgagg
                                                                      180
ggctttcccc tcgaaggtca gccaagaaca ggtcgtcctg cacaccctcc agcccgctca
                                                                      240
cttgctgctt caggtgggcc acggtgtgcg tcagccgcac ctcgtaggtg ctgctgcggc
                                                                      300
cettgttatt cetcaccagg atgttcagag gttcgtcgca tttgtccacc accagcagga
                                                                      360
ccgtgctgcc ggggcccagg ccctggctgg caagggggac cctgtcctgc agcgccacac
                                                                      420
cgctcgggtg gacagccaga cgctgctgga aggcgtgcac gccgatcttc tgggtgatct
                                                                      480
gcgccttcag ctctgacacc gacatggagc tgctcaggga cacctggaat tcgttgcccg
                                                                      540
ccagcatett cacegteagg teccageeca tggetgtggg etgtgggetg tgggecaegg
                                                                      600
cacgagetee tgtactggea aagatgagtt egetgeetet cageeg
                                                                      646
```

```
<210> 6317
<211> 3558
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (298)...(3434)
<223> similar to gi30076 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6317

gcattcccgg gtcgacgatt tcgtcgccgg gacaccaggg ctccgcgctc cgcactcaag 60 aggetecege gteceaacee etegegeeeg egegttegeg gateeaggee gaggacegaa 120 aggggccgcc cgagcccccg gggccggcgc ccagagagcc cagcaaggcc ggccgccctg 180 ccggtgtgcc gccggcgggt gcttctggaa gggccaatgc gttcgggcag cagccctga 240 agccgagccc gaggctaagt gggactgacc ggggcccaga gtggacgaac cgccagcatg 300 gggagagacc agcgcgcggt ggccggccct gccctacggc ggtggctgct gctggggaca 360 gtgaccgtgg ggttcctcgc ccagagcgtc ttggcgggtg tgaagaagtt tgatgtgccg 420 tgtggaggaa gagattgcag tgggggctgc cagtgctacc ctgagaaagg tggacgtggt 480 cagcctgggc cagtgggccc ccaggggtac aatgggccac caggattaca aggattcccc 540 gggctgcagg gacgtaaagg agacaagggt gaaaggggag cccccggagt aacaggaccc 600 aagggcgacg tgggagcaag aggcgtttct ggattccctg gtgccgatgg aattcctgga 660 caccegggge aaggtgggee caggggaagg cegggetaeg atggetgeaa eggaacceag 720 ggagactcag gtccacaggg gccccccggc tctgaggggt tcaccgggcc tcccgggccc 780 caaggaccaa aagggcagaa aggtgagcct tatgcactgc ctaaagagga gcgcgacaga 840 tatcggggtg aacctggaga gcctggattg gtcggtttcc agggacctcc cggccgccct 900 gggcatgtgg gacagatggg tccagttgga gctccaggga gaccaggacc acctggaccc 960 cctggaccaa aaggacagca aggcaacaga ggacttggtt tctacggagt taagggtgaa 1020 aagggtgacg tagggcagcc gggacccaac gggattccat cagacaccct ccacccatc 1080 atcgcgccca caggagtcac cttccaccca gatcagtaca agggtgaaaa aggcagtgag 1140 ggggaaccag gaataagagg catttccttg aagggagaag aaggaatcat gggctttcct 1200 ggacttaggg gttaccctgg cttgagtggt gaaaaaggat caccaggaca gaagggaagc 1260 cgaggcctgg atggctatca agggcctgat ggaccccggg gacctaaggg agaagccgga 1320 gacccaggge eccetggact acetgectae teccetcaee ettecetage aaaaggtgee 1380 agaggtgacc caggattccc aggggcccaa ggggagccag gaagccaggg tgagccagga 1440 gacccgggcc teccaggtcc ecctggcctc tecattggag atggagatca gaggagaggc 1500 ctgccgggtg agatgggacc caagggcttc atcggagacc ccggcatccc tgcgctctac 1560 gggggcccac ctggacctga tggaaagcga gggcctccag gaccccccgg gctccctgga 1620 ccacctggac ctgatggctt cctgtttggg ctgaaaggag caaaaggaag agcaggcttc 1680 cctgggcttc ccggctcccc tggagccccc ggaccaaagg ggtggaaagg tgacgctggg 1740 gaatgcagat gtacagaagg cgacgaagct atcaaaggtc ttccaggact gccaggaccc 1800 aagggetteg caggeateaa eggggageeg gggaggaaag gggacaaagg agaceeegge 1860 caacacggcc teeetgggtt eccagggete aagggagtge etggcaacat tggtgeteee 1920 ggacccaaag gagcaaaagg agattccaga acaatcacaa ccaaaggtga gcggggacag 1980 cccggcgtcc caggtgtgcc cgggatgaaa ggtgacgatg gcagcccagg ccgcgatggg 2040 ctcgatggat tccccggcct cccaggccct cccggtgatg gcatcaaggg ccctccaggg 2100 gacccagget atccaggaat acctggaacg aagggtactc caggagaaat gggccccca 2160 ggactgggcc ttcccggcct caaaggccaa cgtggtttcc ctggagacgc cggcttacct 2220 ggaccaccag getteetggg eceteetgge eeegeaggga eeecaggaca aatagattgt 2280 gacacagatg tgaaaagggc cgttggaggt gacagacagg aggccatcca gccaggttgc 2340 ataggagggc ccaagggatt gccaggcctg ccaggacccc caggccccac aggtgccaaa 2400 ggcctccgag gaatcccagg cttcgcagga gctgatggag gaccagggcc caggggcttg 2460 ccaggagacg caggtcgttg aagggttccc aggaccccca gggttcatag gaccccgagg 2520

```
atccaaaggt gcagtgggcc tccctggccc agatggatcc ccaggtccca tcggcctgcc
                                                                     2580
agggccagat gggccccctg gggaaagggg ccttccctgg gagaagtcct ggggagctca
                                                                     2640
gecegggeea eggggagatg etggtgtgee tggaeageet gggettaaag geetteeegg
                                                                     2700
agacagagge ecceetggat teagaggaag ecaagggatg eetgggatge eagggetgaa
                                                                     2760
gggccagcca ggcctcccag gaccttccgg ccagccaggc ctgtatgggc ctccaggact
                                                                     2820
gcatggattc ccaggagctc ctggccaaga ggggcccttg gggctgccag gaatcccagg
                                                                     2880
ccgtgaaggt ctgcctggtg atagagggga ccctggggac acaggcgctc ctggccctgt
                                                                     2940
gggcatgaaa ggtctctctg gtgacagagg agatgctggc ttcacagggg agcaaggcca
                                                                     3000
tccaggaagc cctggattta aaggaattga tggaatgcct gggacccccg ggctaaaagg
                                                                     3060
agatagaggc tcacctggga tggatggttt ccaaggcatg cctggactca aagggagacc
                                                                     3120
cgggtttcca gggagcaaag gcgaggctgg atttttcgga atacccggtc tgaagggtct
                                                                     3180
ggctggtgag ccaggtttta aaggcagccg aggggaccct gggcccccag gaccacctcc
                                                                     3240
tgtcatcctg ccaggaatga aagacattaa aggagagaaa ggagatgaag ggcctatggg
                                                                     3300
gctgaaagga tacctgggcg caaaaggtat ccaaggaatg ccaggcatcc cagggctgtc
                                                                     3360
aggaatccct gggctgcctg ggaggcccgg ccacatcaaa ggagtcaagg gagacatcgg
                                                                     3420
agteceegge ateceeggtt tgeeaggatt eeetggggtg getggeeece etggaattae
                                                                     3480
gggattccca ggattcatag gaagccggct actggggagg ccgaggcgga agaatcgctg
                                                                     3540
gaacccagga ggcggagg
                                                                     3558
```

```
<210> 6318
<211> 2000
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1926)...(209)
<223> similar to gi1377880 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6318
ttttttttt ttagattaga ataaaaattt atttttgtaa agaattatat tttgtatttg
                                                                       60
caaaagctga aaatgctcat aaaaattacc agcccagagc ttggatttcc accggatcca
                                                                      120
ccacgtgaga caaaagagtc tgtcacttct tcttgccagg tttgagggcc ttttctagac
                                                                      180
cttggatgtg ttttcgaggg agctgatact cttcaagcaa tagccagccg aggtggtgga
                                                                      240
cctggtttcc ctggatctgc acctgaaggc tgtccttggc cccaggggca ggattgacgg
                                                                      300
tggtgctagc ctggcatcgc tgctgaagga tggcagccac tgagtatggg tccagaccat
                                                                      360
aggeeteeaa gtteeggaee aeggteaeet ttttattaga egetetttgt getagggtga
                                                                      420
tgtcaattgg acagattctc cctttcttca caatgggctc ttgtccggga agggtcactt
                                                                      480
gataggcagg ctgtaatttt tccaaacacc tggtcagaag actgtcccat ggaagcttca
                                                                      540
tgactgtatg ctgttcattt ttctctaaga tgcagtcaca taggatggga tccaatctca
                                                                      600
caagattttt gttgtctgca tcaaccaggt catttttctt ggcgtagtta atgacgatcg
                                                                      660
ttcggacctc actgccctcc agaaagctcc ccttcttgtg gccagactcc tggaagagca
                                                                      720
gggtcatgct ggctgggaca cagtagaggg gttttatatc tggagggtga tagggctgtt
                                                                      780
ccctgctacc ctcctggata gtctgggagg tcggggaggg ctcgggtatg acgaaagatg
                                                                      840
taatcctcgg gtgtttccag tccacagcca caatgctctc cacccctttg ctcagctcct
                                                                      900
tcacctgtat aatctgctcc tgctgcattt gctgcaggaa cttagagagc tttttgtagc
                                                                      960
ttgacttctt tatgtccagt tgtcgtcctt cggggcagca ggagaacatg tggctgccaa
                                                                     1020
ggaaagtgct ggtgagtaaa gggaggtcag cctttttgac tcggcacttc aaggcatgta
                                                                     1080
agaagcattg ctgtaacagc tcatccattt gttcttgaag cgttttgcta tctgtggagt
                                                                     1140
```

```
cttggttcag gcccctggtg ctggtgtctt ctggggcttc tgagagagac ttgtcttcac
                                                                     1200
gtgcctggtg aacctcccca ttctcctctt ccccctccag ggtcatgtgc ctcatgtctc
                                                                     1260
cctgcagggt ggagtccatc tggacagacc ccttctcttc actgagatct gctgaatcca
                                                                     1320
gggccagtgg agcaatggaa ggtggagagg acttgtttcc agaccgccac aagtggtcct
                                                                     1380
ggtaagtgtg gagcacagag aagccccttc ccttcaggcc tgacgtgagc atctcagctg
                                                                     1440
tggacatggc tgcaactcca atggctacag gggctctgtt ccccaccaaa gaaatggcac
                                                                     1500
agaggtcgcc cttctgtacc tgaggcagac cagcaggggg catcaccagt ccaggcagca
                                                                     1560
tcaaatctgc tccccctacc agtttctcga gcaccagagg ccatgttgta aaggttggca
                                                                     1620
gaagatcagg ataggaccac agcgtgtaca ctgttggata cagatttttc tccagttcaa
                                                                     1680
agaggatggg gttaccacca ctcacgtaca cagtcactgc atcccctttg tgagcataca
                                                                     1740
acttcacaat gttgagctcc tcctttccag gtactaactc agagacttga tcagttccaa
                                                                     1800
gggtggggaa agcagttgtc acatcagctc gaagctttct cctgtccgac cccttgatgg
                                                                     1860
ccgtgttgga cttgacccga aaggccttgg caaacatgtc tgctggggtg gcctggggaa
                                                                     1920
gagagcacag aagccaggga atgtcaagaa agcgagggcg cagcagctgc caggccctca
                                                                     1980
gccgtggggg cagccatgct
                                                                     2000
```

```
<210> 6319
<211> 6345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (31)...(6032)
<223> similar to gi35788 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6319 gtctcctctg gatcttaact actgagcgca atgctgagcc atggagccgg gttggccttg 60 tggatcacac tgagcctgct gcagactgga ctggcggagc cagagagatg taacttcacc 120 ctggcggagt ccaaggcctc cagccattct gtgtctatcc agtggagaat tttgggctca 180 ccctgtaact ttagcctcat ctatagcagt gacaccctgg gggccgcgtt gtgccctacc 240 tttcggatag acaacaccac atacggatgt aaccttcaag atttacaagc aggaaccatc 300 tataacttca agattatttc tctggatgaa gagagaactg tggtcttgca aacagatcct 360 ttacctcctg ctaggtttgg agtcagtaaa gagaagacga cttcaaccgg cttgcatgtt 420 tggtggactc cttcttccgg aaaagtcacc tcatatgagg tgcaattatt tgatgaaaat 480 aaccaaaaga tacagggggt tcaaattcaa gaaagtactt catggaatga atacactttt 540 ttcaatctca ctgctggtag taaatacaat attgccatca cagctgtttc tggaggaaaa 600 cgttcttttt cagtttatac caatggatca acagtgccat ctccagtgaa agatattggt 660 atttccacaa aagccaattc tctcctgatt tcctggtccc atggttctgg gaatgtggaa 720 cgataccggc tgatgctaat ggataaaggg atcctagttc atggcggtgt tgtggacaaa 780 catgctactt cctatgcttt tcacgggctg tcccctggct acctctacaa cctcactgtt 840 atgactgagg ctgcagggct gcaaaactac aggtggaaac tagtcaggac agccccatg 900 gaagteteaa atetgaaggt gacaaatgat ggeagtttga eetetetaaa agteaaatgg 960 caaagacctc ctgggaaatg tggattctta caatatcacc ctgtctcaca aagggaccat 1020 caaggaatcc agagtattag caccttggat tacttgaaac tcactttaaa gagttagtcc 1080 ccggtcgact ttattcaagt tacttgttca gctgtgtctc tgggtgaact gtctgctcag 1140 aagatgggca gtgggcagaa catttccaga caaagttgca aacctggagg caaacaataa 1200 tggcaggatg aggtetettg tagtgagetg gtegeeeet getggagaet gggageagta 1260 teggateeta etetteaatg attetgtggt getgeteaac ateaetgtgg gaaaggaaga 1320

```
aacacagtat gtcatggatg acacggggct cgtaccggga agacagtatg aggtggaagt
                                                                    1380
cattgttgag agtggaaatt tgaagaattc tgagcgttgc caaggcagga cagtcccct
                                                                    1440
ggctgtcctc cagcttcgtg tcaaacatgc caatgaaacc tcactgagta tcatgtggca
                                                                    1500
gacccctgta gcagaatggg agaaatacat catttcccta gctgacagag acctcttact
                                                                    1560
gatccacaag tcactctcca aagatgccaa agaattcact tttactgacc tggtgcctgg
                                                                    1620
acgaaaatac atggctacag tcaccagtat tagtggagac ttaaaaaaatt cctcttcaqt
                                                                    1680
aaaaggaaga acagtgcctg cccaagtgac tgacttgcat gtggccaacc aaggaatgac
                                                                    1740
cagtagtctg tttactaact ggacccaggc acaaggagac gtagaatttt accaagtctt
                                                                    1800
actgatccat gaaaatgtgg tcattaaaaa tgaaagcatc tccagtgaga ccagcagata
                                                                    1860
cagettecae teteteaagt ceggeageet gtacteegtg gtggtaacaa cagtgagtgg
                                                                    1920
agggatetet tecegaéaag tggttgtgga gggaagaaca gteeetteea gtgtgagtgg
                                                                    1980
agtaacggtg aacaattccg gtcgtaatga ctacctcagc gtttcctggc tgctggcgcc
                                                                    2040
cggagatgtg gataactatg aggtaacatt gtctcatgac ggcaaggtgg ttcagtccct
                                                                    2100
tgtcattgcc aagtctgtca gagaatgttc cttcagctcc ctcaccccag gccgcctcta
                                                                    2160
caccgtgacc ataactacaa ggagtggcaa gtatgaaaat cactccttca gccaagagcg
                                                                    2220
gacagtgcct gacaaagtcc agggagtcag tgttagcaac tcagccagga gtgactattt
                                                                    2280
aagggtatcc tgggtgcatg ccactggaga ctttgatcac tatgaagtca ccattaaaaa
                                                                    2340
caaaaacaac ttcattcaaa ctaaaagcat tcccaagtca gaaaacgaat gtgtatttgt
                                                                    2400
tcagctagtc cctggacggt tgtacagtgt cactgttact acaaaaagtg gacaatatga
                                                                    2460
agccaatgaa caagggaatg ggagaacaat tccagagcct gttaaggatc taacattgcg
                                                                    2520
caacaggagc actgaggact tgcatgtgac ttggtcagga gctaatgggg atgtcgacca
                                                                    2580
atatgagate cagetgetet teaatgaeat gaaagtattt eeteettte acettgtaaa
                                                                    2640
taccgcaacc gagtatcgat ttacttccct aacaccaggc cgccaataca aaattcttgt
                                                                    2700
cttgacgatt agcggggatg tacagcagtc agccttcatt gagggcttca cagttcctag
                                                                    2760
tgctgtcaaa aatattcaca tttctcccaa tggagcaaca gatagcctga cggtgaactg
                                                                    2820
gactcctggt gggggagacg ttgattccta cacggtgtcg gcattcaggc acagtcaaaa
                                                                    2880
ggttgactct cagactattc ccaagcacgt ctttgagcac acgttccaca gactggaggc
                                                                    2940
cggggagcag taccagatca tgattgcctc agtcagcggg tccctgaaga atcagataaa
                                                                    3000
tgtggttggg cggacagttc cagcatctgt ccaaggagta attgcagaca atgcatacag
                                                                    3060
3120
cctgcttcta actgaaaatg gaatccttct gcgcaacaca tcagagccag ccaccactaa
                                                                    3180
gcaacacaaa tttgaagatc taacaccagg caagaaatac aagatacaga tcctaactgt
                                                                    3240
cagtggaggc ctctttagca aggaagccca gactgaaggc cgaacagtcc cagcagctgt
                                                                    3300
caccgacctg aggatcacag agaactccac caggcacctg teetteeget ggaccgcete
                                                                    3360
agagggggag ctcagctggt acaacatctt tttgtacaac ccagatggga atctccagga
                                                                    3420
gagageteaa gttgaceeac tagteeagag ettetette cagaaettge tacaaggeag
                                                                    3480
aatgtacaag atggtgattg taactcacag tggggagctg tctaatgagt ctttcatatt
                                                                    3540
tggtagaaca gtcccagcct ctgtgagtca tctcaggggg tccaatcgga acacgacaga
                                                                    3600
cagcetttgg ttcaactgga gtccagcete tggggacttt gacttttatg agetgattet
                                                                    3660
ctataatccc aatggcacaa agaaggaaaa ctggaaagac aaggacctga cggagtggcg
                                                                    3720
gtttcaaggc cttgttcctg gaaggaagta cgtgctgtgg gtggtaactc acagtggaga
                                                                    3780
teteageaat aaagteacag eggagageag aacageteea agteeteeca gtettatgte
                                                                    3840
atttgctgac attgcaaaca catccttggc catcacgtgg aaagggcccc cagactggac
                                                                    3900
agactacaac gactttgagc tgcagtggtt gcccagagat gcacttactg tcttcaaccc
                                                                    3960
ctacaacaac agaaaatcag aaggacgcat tgtgtatggt cttcgtccag ggagatccta
                                                                    4020
tcaattcaac gtcaagactg tcagtggtga ttcctggaaa acttacagca aaccaatttt
                                                                    4080
tggatctgtg aggacaaagc ctgacaagat acaaaacctg cattgccggc ctcagaactc
                                                                    4140
cacggccatt gcctgttctt ggatccctcc tgattctgac tttgatggtt atagtattga
                                                                    4200
atgeeggaaa atggaeacee aagaagttga gtttteeaga aagetggaga aagaaaaate
                                                                    4260
tetgeteaae ateatgatge tagtgeeeca taagaggtae etggtgteea teaaagtgea
                                                                    4320
gtcggccggc atgaccagcg aggtggttga agacagcact atcacaatga tagaccgccc
                                                                    4380
ccctcctcca cccccacaca ttcgtgtgaa tgaaaaggat gtgctaatta gcaagtcttc
                                                                    4440
catcaacttt actgtcaact gcagctggtt cagcgacacc aatggagctg tgaaatactt
                                                                    4500
cacagtggtg gtgagagagg ctgatggcag tgatgagctg aagccagaac agcagcaccc
                                                                    4560
tetecettee tacetggagt acaggeacaa tgeetecatt egggtgtate agactaatta
                                                                    4620
ttttgccagc aaatgtgccg aaaatcctaa cagcaactcc aagagtttta acattaagct
                                                                    4680
tggagcagag atggagagcc taggtggaaa atgcgatccc actcagcaaa aattctgtga
                                                                   4740
```

```
tggaccactg aagccacaca ctgcctacag aatcagcatt cgagctttta cacagctctt
                                                                     4800
tgatgaggac ctgaaggaat tcacaaagcc actctattca gacacatttt tttctttacc
                                                                     4860
catcactact gaatcagage cettgtttgg agetattgaa ggtgtgagtg etggtetgtt
                                                                     4920
tttaattggc atgctagtgg ctgttgttgc cttattgatc tgcagacaga aagtgagcca
                                                                    4980
tggtcgagaa agaccctctg cccgtctgag cattcgtagg gatcgaccat tatctqtcca
                                                                     5040
cttaaacctg ggccagaaag gtaaccggaa aacttcttgt ccaataaaaa taaatcagtt
                                                                    5100
tgaagggcat ttcatgaagc tacaggctga ctccaactac cttctatcca aggaatacga
                                                                    5160
ggagttaaaa gacgtgggcc gaaaccaqtc atqtqacatt qcactcttqc cqqaqaataq
                                                                    5220
agggaaaaat cgatacaaca atatattgcc ctatgatgcc acgcgagtga agctctccaa
                                                                    5280
tgtagatgat gateettget etgactacat caatgecage tacateeetg geaacaactt
                                                                    5340
cagaagagaa tacattgtca ctcagggacc gcttcctggc accaaggatg acttctggaa
                                                                    5400
aatggtgtgg gaacaaaacg ttcacaacat cgtcatggtg acccagtgtg ttgagaaggg
                                                                    5460
ccgagtaaag tgtgaccatt actggccagc ggaccaggat tccctctact atggggacct
                                                                    5520
catcctgcag atgctctcag agtccgtcct gcctgagtgg accatccggg agtttaagat
                                                                    5580
atgcggtgag gaacagcttg atgcacacag actcatccgc cactttcact atacggtgtg
                                                                    5640
gccagaccat ggagtcccag aaaccaccca gtctctgatc cagtttgtga gaactgtcag
                                                                    5700
ggactacatc aacagaagcc cgggtgctgg gcccactgtg gtgcactgca gtgctggtgt
                                                                    5760
gggtaggact ggaaccttta ttgcattgga ccgaatcctc cagcagttag actccaaaga
                                                                    5820
ctctgtggac atttatggag cagggcacga cctaagactt cacagggttc acatggacca
                                                                    5880
gactgagtgt cagtatgtct acctacatca gtgtgtaaga gatgtcctca gagcaagaaa
                                                                    5940
gctacggagt gaacaagaaa accccttgtt tccaatctat gaaaatgtga atccagagta
                                                                    6000
tcacagagat ccagtctatt caaggcattg agaatgtacc tgaagagctc ctggataaaa
                                                                    6060
attattcact gtgtgatttg tttttaaaaa cttgcttcat gccctacaga ggtgccagct
                                                                    6120
atttctgttg atactatgta taatttatta atctggagaa tgtttaaaat tttatataat
                                                                    6180
ttaaaggtaa cagatattat tgtacatagt tgtattttgt agtttcttct gtaaatatgt
                                                                    6240
atttttcata atgtttaata ttaagcttta tataatacta tttttccaca ctaaagtgtt
                                                                    6300
catgacttgt tctacataaa actaattcaa cctgtaaaaa aaaaa
                                                                    6345
```

```
<210> 6320
<211> 1398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1286)...(196)
<223> similar to gi4929831 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6320
ttttgtgtga attcttaagc ttgttttaca aaacttttta ttcatcagag ctgtagtgaa
                                                                       60
atatcatcat tgtaattgat attctagcac tacaaaaggc acaatgaagc gttatttagt
                                                                      120
tecagtactg gaaagacaga gggaacagca cateetteet tggacatget ttggtgetge
                                                                      180
tgtaagtggt catcacagtt ttgattttct ggataagaag ttcaccacag catttgtgca
                                                                      240
ttcatctgat agccatcttc cctgaaggac attgcattct tcagcattaa cagcgtgtag
                                                                     300
tttttctctc tctcttttcc tgattacctc ttttgaaatt ctcaaggcat ttgggggaag
                                                                     360
ctttgcaaat gccttcagcc tggtccagac ttctttctga aaagtgctat cagggaaaac
                                                                      420
ttcagtaaca agtccttgag cacatgcctc tcccgctgtt aacttctttc caaaaataag
                                                                     480
catctctgtt gccttggctg ggctcattat cttcggaaaa gtgtaagagg agcatccttc
                                                                      540
cggactttgg cctaggtgac taaatggtgt atgaaatgtt gccctgtcag atgcatacac
                                                                     600
```

```
ggcatcgaat agcccaagga gggtgacgga gatgcccaca gctggaccat tgaccactgc
                                                                      660
aatcagaggc ttaggaaaat ctataaaaca gcccacaaat tccctcagta aaacggcatt
                                                                      720
atttttaget tteteeteta etecaceagg gggaatatea gtgaagttag teagateatt
                                                                      780
cccactactg taatagtcac catttcctgt taaaacagtg atgattgagt catccttgct
                                                                      840
ggcagcttta agtgcacgca taatttcatg atacatctca gtgtttatgg catttttctt
                                                                      900
tttgaggccg gttgaacatg atctttgtga tgccatcttc gggaggtcac caccagagtt
                                                                      960
tccaaaccca gttgatttcc tgtctgttcc aggctccacc tggactagga ggattcccaa
                                                                     1020
tggaaggact caaaactgga caccaaatcc acatagttct gcctgggcag cttccttggg
                                                                     1080
gcaggctgcc aagggcattc catgcgtccc atttggcctt gttgatcaag tcaaatacac
                                                                     1140
ctggtttggg gcattttaca agttccttca gtggcctgct tatatagcgc gtagagtttt
                                                                     1200
agcttcactt cgtttcctgg atcctttttc aagagtttca cttgatttat tgaattttca
                                                                     1260
aagteettet gaetggetet cattgetgtt etatteatgt geagetgaae taeegggaaa
                                                                     1320
ctagtgacct gcagagaact cggacacgaa cgccgcgcca gtctccaagc caagtacgcc
                                                                     1380
atcgccatcc ctcgtgcc
                                                                     1398
```

```
<210> 6321
<211> 7347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7111)...(448)
<223> similar to gi5225312 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6321
ttttttttt ttaactgttc catctttatt agaaaagcaa ccaaaaaaag ggtgaggggt
                                                                       60
gageetggee etaaaggaee eeteeaetgt gacacaggea gageeggete ateeeggegt
                                                                      120
cgaggggtgg atatggccag ctgggtgtgg gcagatttac aaagtcaaca cttcatagaa
                                                                      180
aaggatgeeg eetggegtge agatggegae caatecaeet teacatgget aaggegggee
                                                                      240
cctcctcctc tgggctccca tgtggtgtgg acagcctgac ctgggtacag ggaggatgcc
                                                                      300
atgaggaggt gggctgggca ggcctggggg ctgtgtgggg agtggcatcc atgtgggcct
                                                                      360
ctggtcctgc ccagggtcct gcccaggggg cattccaggc ctggctggtc ccctggggcg
                                                                      420
tggcggtggg gctgcagtgg cccctcaaat gtccatgtag tcgtcgtcct cgtctgtctc
                                                                      480
gctctccagc gaggactcct ggctggatgt ctccaggacc tccagggctg gctggcatag
                                                                      540
gctctccttc ctcacgttgg cagcagactg ggcagaaagg atggctgact tcagcttctg
                                                                      600
cttggtctcc tccgagatgc tgcctttggg ggagagcagg gttggggtgg gtggcgtgac
                                                                      660
ggtgatctca ggggggaact tggtggcggc ggaggggatg accagctttg gcatgttggg
                                                                      720
cagggggggg gacttagccc ggctgggctc aggcttgcct gggtgaccct ctggtggctg
                                                                      780
ggcactccca ctgctggggg ccttggagct ggcagctgtt gggggagagc tcaggggctg
                                                                      840
agteteacte geageeteet gageeteece atecettete ggeteaggee teagttteee
                                                                      900
ctcctggctg caggtgggct cagcgcctgt gcccagggca gcctctgccg gccagcagtg
                                                                      960
tggctctgcc ggggaacttg tgggggccat cttcacctgc ggactgtgcc gtggctcctg
                                                                     1020
aggegggaag etggtgeeet etgeeaetet egeeagetet teteeetetg ggeeeagaga
                                                                     1080
ggccatgctg ggggtagctt caggcctgtg tggccgggga ggcccagggt ccttggactg
                                                                     1140
gtccagggtg gaagctgatg ctgacggagg gcaggtgata atagttgtgg cggcagctag
                                                                     1200
tgcagggcga ggcttggtgt gagcatcact gggccgctgg acagagtcag ctggcacagg
                                                                     1260
gtcaggggct gtgggcacca ctgtcacagg aaagaagttc tctcggctgt ctttggggtg
                                                                    1320
ctttggagtg gtgggggtgt cccccgaggc ctgtctctgg gcggcagccc caagatggac
                                                                     1380
```

```
ctggcagaac ttcacagcet getecagege ageeteetea tecacetget tgatgageat
                                                                   1440
gtaggtetee gaeatgatee tetecaeaeg geeeaggtea taggeeaeae eettetggee
                                                                   1500
ctgctgccac acacggtagg catccaacag aagtgtcttg cctgactctg tgtcctccag
                                                                   1560
gagetteete ttgeggetga geegggagag eggeteetee gggtggeeee etgeeetggt
                                                                   1620
1680
ctgctgccgg gcactgatgc tcagctcctc cagggacagc tcagtgggcc ggctctcggg
                                                                   1740
gccccggtcc cttgcggggc gacctggcag caggggtggt gtccgctcca agtctgagtg
                                                                   1800
gcaaacagtg gcctcaactc gtgtccaatg ggctcagtgg gccctgcccg tgggctctct
                                                                   1860
ttatccttcc gctccccgct ttggtctgca ctgtctcctg catccatggc cacaggccgg
                                                                   1920
tggttgagga ggcccacttt gcctcctggc tcgggccctg gccctgagcc atcagccaga
                                                                   1980
gggggcttct tcggctgggg gaggccctcc tggccatcct caggactggc cttgtgtgag
                                                                   2040
acatcggtgg tcatcctggc tccggggagg ccacagacct tgggccctgg gcgttctgac
                                                                   2100
ccctctgcga gctcgctcag cgtgtcttcg agcaccttca cagtgaggat gaaggcccgc
                                                                   2160
tgcgccagga cctggcggtc agcatctcgc agatacttct tgccctggtc tggggtccgc
                                                                   2220
tgaagcatgg aggacacctt cagcagggtg ctgtggtccc gcagctgggc cagcaccttg
                                                                   2280
agcagcagca cgatggagcg gttcatgtgc caggcaaagc tgcccggccg gtcaatctcg
                                                                   2340
tccacgggga tccgccagat gccgttgaag aaattggtct tgttcctctc gcagaagagc
                                                                   2400
ccctgtgccg gcatgtgctg cagttgttgc cacgggatac tgctgcctag caacacgtcg
                                                                   2460
cgggcccact ggaggttccg gtgggtcttg ctgtaggtgt agaggaaggc cagacggtag
                                                                   2520
agactettat agtgetgggg gaageggete aggeaeagge ggaaggagge gatgeaetge
                                                                   2580
tetgtgagaa actgeegetg eteeteagea eeageeggea geeeetgggg gaaggeeact
                                                                   2640
ggctcccctg ggaggtcccc tctcttcttc ccatcccaca gggtgggtgt ggatgctgag
                                                                   2700
ggcttgccag ggatgcaagc agaggctggg gtttctgcag caggcttctg gacaccttgc
                                                                   2760
tetgcagece ggaageette tgtactetee aatgacteet egttttttee tettettet
                                                                   2820
gtggccccct gaagatettt acccgtcgct cctgcttggg aactgagaat gggcagcctc
                                                                   2880
ttctctgtgt aggatttcct ggagccttcc agtaagctgg tgggctcatt aaagaagtcc
                                                                   2940
3000
gttgcctgct ggtggggttt tttacatttg acgtaatcgt ggtcaatcgg agtggctgtg
                                                                   3060
taaggtgggg atgtcagacc tgggccagag gaggaggga gggaggctcc ggggcccggc
                                                                   3120
agtgtcccag ctgaagagtg ggagtcctcg tccaccaggc aggccttctc cttttctgaa
                                                                   3180
gctttgggtg tgttcttctc ctcgcccctg gcaaagggtc cttctgcagc ctccttcata
                                                                   3240
aagttgacca ggacctctgc accaacccca gaatcgggct tccccaggag cttcaggatg
                                                                   3300
gaagcatgga gccgaaagta cacctccagg gcctccatgg ccagctcagg tgggttgtgg
                                                                   3360
tagtggatct tcttggggta gcgggcagcc tcctcgtgca ggtagtggcc agcctgcctg
                                                                   3420
tagtgcagca agtaaacggt gggtggctgc tgctgcttct cagccacctt gcccagcatg
                                                                   3480
tagtggatga gccactcctc ctcgtcacca tcaccctcgc agcgggctgc tgatgtgaaa
                                                                   3540
cagtgettgg etgtetetag catgetgteg egeeggeeet ceatetgetg caegagetea
                                                                   3600
gggggcagct cgcctctcca ctgcttcaat tgacgtgagg cgaatgagtg caaggcatag
                                                                   3660
gacatggtgc catactcaat ccatagggac aagttggagc tgtcaatctc cagggcccga
                                                                   3720
cggaagcagt tcaagacggg cgtggcatgc ttccaaatgg gcccatcact cttcagctca
                                                                   3780
ttggagttca gcttgtcctg aatgcggctg gcccgggcca gagccatgcc tgcccaggaa
                                                                   3840
tcaaacctat tggggcagat gcagatgtca tgcatgtaga acttgatggc cttggactgc
                                                                   3900
tccttgtttt tgaaatgata atcagccagg aggtagtaaa gctcgttcac cactggaggg
                                                                   3960
gaggggtcag ccccctctgg gaggcagggt acctcagttg aagttccctc aatgtaggca
                                                                   4020
gagactttgt ccaggctaag ggctggcctc tctgtgcgag gcacaatggt ggcaattctc
                                                                   4080
ttcagtaggt tggccaagtc agcagacacg gtgctggtct tatagctgtc aaattcagga
                                                                   4140
agggtettgg gettaaaata etcaaacatg aacagtgeat eeteccatat aagatecace
                                                                   4200
tgctgggccg agtgttcctc caggtacctg gccttactct tcttgctggg gaagctgtac
                                                                   4260
aggcagtaga agcactgctc caaggctgtc tccagctcct ccttgtaagg gtgcgtgtct
                                                                   4320
tcagaggtgg atgcagccag ttccttctgg agtactcgca catagaatcg cagcagagcc
                                                                   4380
ccatctgaat tgcagcacca ggaccttctg cccaaatact cgtgggctgt gttcagcagc
                                                                   4440
atgagggagg atgggagcat gggcgtctct gacatccctt cctccgctgg gttttggagc
                                                                   4500
tgctgctggt ggcacagaga atggaaggtg tcttcctcct gccagatgat ccggtgtaga
                                                                   4560
atgatecagg gtageactga agagaegtgg ggeteettgg eeteeteetg cacagecatg
                                                                   4620
ctgcagtcaa tgacctggat gaggttgttg gtgagccgca caaggccagt ggtggaggat
                                                                   4680
gatacettca ggatgetace actgetgtce geagagaggg cetgetegat geceateage
                                                                   4740
agttgggtca ctgtggccac ccactcctcc ttggcggcag cctcacctga gttcaccatc
                                                                   4800
```

```
tgctggacag cctcgttcag agccacatcg gaacactcaa aacactgccg atagtccttc
                                                                     4860
ageeggagea aggagteetg cagaagaage agetgggetg geeteteagg aatggaagte
                                                                     4920
ataaactcca ggtgtttggc ccggtcaaac ccactggtgc acaaagtggg gcggagcaga
                                                                     4980
tgcacaacag cettgtagte geetgettea tacageeget gaateteete cagggactgg
                                                                     5040
caccgeteca gegactteag gttettatea ateteeteea gggaaaceae agagteatta
                                                                     5100
tggaggttgg gcagccggat gacaatgtct cttcgttcag cccctgcctc cacctggatg
                                                                     5160
geggtggaac tetggageat ttetgtgeag atgteatagt tetceaggge etgeteeatg
                                                                     5220
tetecetgea gegecaggaa gegageette agecagtaaa caeggaceae aaacteeage
                                                                     5280
caaccatcct cgaacaggtc gcgctgggac gaggcaaatg acagctgtag gaggtcaccc
                                                                     5340
aggcagtggg tccctgggaa gtcaggtcca aatctgccat tcaccatacc agcagggcag
                                                                     5400
ttccgaggag acactgcaga gcttctgcct ttggtcagca gccactggtc cagctggagt
                                                                     5460
tccatgcagg agagagacat cagcatcatg tccttgatgt gcttgttgct gcagtccctc
                                                                     5520
agcagcgggt tgggcaggct ggtgctgtgc ctcctccagc tgtggtagac gctgagcacg
                                                                     5580
acctccgcca agcctggagg ccaccttacc aagaacttgt ggcccatggc tttcaggtag
                                                                     5640
cgcatcatca gctccaggat gccccgttg gttaggttct ccagcaggaa ctcatgcacg
                                                                     5700
tectgetttt cagattecat gaatgtgget gagteaaatg acageetttg aggeecaatg
                                                                     5760
cttgggaagc tttccagttt ggcttctgac tggacttcat agttattaaa ggaatcatct
                                                                     5820
tectecteag ggtecagett tettaacetg gaeggeaaga aetteateag aageteetgg
                                                                     5880
aagtctactt tctcttcttt ttgcacttgg tgtttcggac acgggcagac cgccgctttg
                                                                     5940
ctgtttctcc actctcttct gaaatcttct tccgttttac ccctttcttg gatttatctc
                                                                     6000
ccccagaaat atcacccaca ggagcgcctg tctccaacag accaggactg tgcagtggga
                                                                     6060
agctggttgt agccacagag gtgtaggaga ccacaggctc ggcgacagcc acagctgggt
                                                                     6120
tggtgctgac agtgcttggc tggatcacgt taactggcgt caccaccatg gaggactcaa
                                                                     6180
gaggetgget ggggteetgg tagteegaca aatcaateet tttgeeaagg etgggaegtg
                                                                     6240
ggggctcaca ggtggtgaga tgattgtaca tggccagcaa gctctctccg aggcacttcc
                                                                     6300
aggtgaagaa aggaatgggc tgcacaagtt tcaggtccgg ctccttctcc cgcacaatca
                                                                     6360
gcgcttgcct ctttttcgc agccccaagg cctcatctac aatcgcctgt gtctcagctg
                                                                     6420
cactcaccga aacatcgtga atcgacatgt cacatttgag gaacattctg agagaggtcc
                                                                     6480
ttccggagac aaggetgete etcaaaaate tteteettga ggaccagece tttgetgtac
                                                                     6540
cggcaatcct tctccaaagc tttgcaggat gaagtacaga catgttgtgt aatcactgag
                                                                     6600
ggtgtacagg acagtgatta ggttatccaa acagggccag tggtcaggat tgcaccgcag
                                                                     6660
cccttcctca aaagcatggc gagccagggg gatccggatg agcctcaggg ccacatgtcc
                                                                     6720
aatcttatac cagaggttga catctgtgga gtccagcatc actgcctcta agtagaactc
                                                                     6780
catggctgtc tccagatcct cccgctgggc tgccagctgg gccaagttct tataagtgga
                                                                     6840
atatttcagt atcagcccag ggtgtttcaa cccctctttc tcatcaccgg atgaaactgc
                                                                     6900
ctcccgcagc aggctcgcct ccaagagctc atggtaggct ttggcagact cctcaaaccg
                                                                     6960
gtcatgtttc tgcagatcaa gggccttgtg gtacaatgca aaagcctctg cttcctgagc
                                                                     7020
ctcctttgtc tgggttttgt gacttttaaa gcttccttca tgatcatcct caatggtgga
                                                                     7080
gctggcattt aaggctgcaa ttcgaatcat attcagagag attcagcact gccacgagca
                                                                     7140
tcacttctca tcactggcaa aggttgcccc agtccacaac tctccaggcg tctccacagc
                                                                     7200
aacggccagt ctgtcccgac caccgcgccg tccggctgcg cgcctgacaa caaggcgtgc
                                                                     7260
teccattgge teeggtgeeg gttgtgeeag ceaateageg ggggegeaeg cacegetege
                                                                     7320
tctccgcggg ctgcttagct gacgaaa
                                                                     7347
```

```
<210> 6322
<211> 1355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (171)...(794)
<223> similar to gi4538973 in the genepept database release 114,
```

```
<400> 6322
cgacccacgc gtccgcttgc gcgagccggg ctgtcgggtg tgttttgctc tccagcctcc
                                                                       60
gtegtetetg cageacteeg ggtteteete cagagegeta gteecaggag eteggaatgt
                                                                      120
tegtggaact taataacetg ettaacacea eeceegacag ggeggageag gggaaactga
                                                                      180
ctctactctg tgatgccaag acagatggga gtttccttgt acaccacttt ctctccttct
                                                                      240
atctcaaagc taattgtaaa gtctgctttg tggcactcat ccagtccttc agccactaca
                                                                      300
gtatcgtggg acagaagctg ggtgtcagcc tgaccatggc gcgggagcgt gggcagcttg
                                                                      360
tgttccttga gggactcaag tctgcagtgg acgtcgtctt ccaggctcaa aaggagccac
                                                                      420
accccctgca gtttctcagg gaggctaatg ctgggaactt gaaaccattg tttgagtttg
                                                                      480
tacgggaggc cctgaagcca gtagacagtg gagaggctcg gtggacgtac ccggtgctgt
                                                                      540
tggtggacga cetcagtgtg etcetgagee tgggcatggg ggeggtgget gtgetagaet
                                                                      600
tcattcacta ctgcagagcc accgtgtgct gggaactaaa gggaaacatg gtggtccttg
                                                                      660
tgcacgacag tggagatgcg gaggatgagg agaatgacat cctgctgaat ggcctcagtc
                                                                      720
atcagageca tetgataetg egggetgagg geetggeeae tggettetge agggatgtge
                                                                      780
acgggcaget gaggatectg tggaggagae categeagee egeagteeae egggateaga
                                                                      840
gcttcactta ccagtataag atacaggaca aaagcgtgtc cttttttgcc aaaggaatgt
                                                                      900
etectgetgt tetgtgaeet gattteggag eagetgaage tacataggae tgtttttgga
                                                                      960
cgtggaagat agagcaacat agcaagaatg ggtctttctc ctctgtagta atatttcagg
                                                                     1020
ctggaccggc gactccactg tgaccagagg gttgagtgct gcagtgatgg catgccttgg
                                                                     1080
ctgccctggg ccctgttcag aaaacacaag ggaccacaat cctgcctttg ctgagagaga
                                                                     1140
ggctggatgc tagacccaag tgaaaggggt cctttggagc ctttgtttaa atatgcctta
                                                                     1200
gccccagctg cccatttttg gttgacaagc ctttcagagc cagagtgggt atagatgtgc
                                                                     1260
cagccaggag atggcaccgg atggcaggtg tgcaaggtga caactaggat aatcatggct
                                                                     1320
ggaataaagt aagtttccac actggaaaaa aaaaa
                                                                     1355
```

```
<210> 6323
<211> 836
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (97)...(707)
<223> similar to gi5441879 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6323
gacccacgcg tecgeccacg cgtccggcca ggaggcggag tggaagtggc cgtggggcgg
                                                                       60
gtatgggact agctggcgtg tgcgccctga gacgctcagc gggctatata ctcgtcggtg
                                                                      120
gggccggcgg tcagtctgcg gcagcggcag caagacggtg cagtgaagga gagtgggcgt
                                                                      180
ctggcggggt ccgcagtttc agcagagccg ctgcagccat ggccccaatc aaggtgggag
                                                                      240
atgccatccc agcagtggag gtgtttgaag gggagccagg gaacaaggtg aacctggcag
                                                                      300
agetgtteaa gggeaagaag ggtgtgetgt ttggagttee tggggeette acceetggat
                                                                      360
gttccaagac acacctgcca gggtttgtgg agcaggctga ggctctgaag gccaagggag
                                                                      420
tccaggtggt ggcctgtctg agtgttaatg atgcctttgt gactggcgag tggggccgag
                                                                      480
```

```
cccacaaggcggaaggcaaggttcggctctggctgatcccactggggcctttgggaagg540agacagacttattactagatgattcgctggtgtccatctttgggaatcgacgtctcaaga600ggttctccatggtggtacaggatggcatagtgaaggcctgaatgtggaaccagatggca660caggcctcacctgcagcctggcacccaatatcatctcacagctctgaggccctgggccag720attacttcctccacccctccctatctcacctgcccagccctgtgctggggccctgcaatt780ggaatgttggccagatttctgcaataaacacttgtggtttgcggccaaaaaaaaaa836
```

```
<210> 6324
<211> 3654
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (24)...(3261)
<223> similar to gi1531548 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6324 cttttctaag ctttctgtgt tacccccggt tccgctgtct tttctgtcta cagtttgcga 60 teccegegte caggatggag cagetgaacg aactggaget getgatggag aagagttttt 120 gggaggaggc ggagctgccg gcggagctat ttcagaagaa agtggtagct tcctttccaa 180 gaacagttct gagcacagga atggataacc ggtacctggt gttggcagtc aatactgtac 240 agaacaaaga gggaaactgt gaaaagcgcc tggtcatcac tgcttcacag tcactagaaa 300 ataaagaact atgcatcctt aggaatgact ggtgttctgt tccagtagag ccaggagata 360 tcattcattt ggagggagac tgcacatctg acacttggat aatagataaa gattttggat 420 atttgattct gtatccagac atgctgattt ctggcaccag catagccagt agtattcgat 480 gtatgagaag agctgtcctg agtgaaactt ttaggagctc tgatccagcc acacgccaaa 540 tgctaattgg tacggttctc catgaggtgt ttcaaaaaagc cataaataat agctttgccc 600 cagaaaagct acaagaactt gcttttcaaa caattcaaga aataagacat ttgaaggaaa 660 tgtaccgctt aaatctaagt caagatgaaa taaaacaaga agtagaggac tatcttcctt 720 cgttttgtaa atgggcagga gatttcatgc ataaaaacac ttcgactgac ttccctcaga 780 tgcagctctc tctgccaagt gataatagta aggataattc aacatgtaac attgaagtcg 840 tgaaaccaat ggatattgaa gaaagcattt ggtcccctag gtttggattg aaaggcaaaa 900 tagatgttac agttggtgtg aaaatacatc gagggtataa aacaaaatac aagataatgc 960 cgctggaact taaaactggc aaagaatcaa attctattga acaccgtagt caggttgttc 1020 tgtacactct actaagccaa gagagaagag ctgatccaga ggctggcttg cttctctacc 1080 tcaagactgg tcagatgtac cctgtgcctg ccaaccatct agataaaaga gaattattaa 1140 agctaagaaa ccagatggca ttctcattgt ttcaccgtat tagcaaatct gctactagac 1200 agaagacaca gcttgcttct ttgccacaaa taattgagga agagaaaact tgtaaatatt 1260 gttcacaaat tggcaattgt gctctttata gcagagcagt tgaacaacag atggattgta 1320 gttcagtccc aattgtgatg ctgcccaaaa tagaagaaga aacccagcat ctgaagcaaa 1380 cacacttaga atatttcagc ctttggtgtc taatgttaac cctggagtca caatcgaagg 1440 ataataaaaa gaatcaccaa aatatctggc taatgcctgc ttcggaaatg gagaagagtg 1500 gcagttgcat tggaaacctg attagaatgg aacatgtaaa gatagtttgt gatgggcaat 1560 atttacataa tttccaatgt aaacatggtg ccatacctgt cacaaatcta atggcaggtg 1620 acagagttat tgtaagtgga gaagaaaggt cactgtttgc tttgtctaga ggatatgtga 1680 aggagattaa catgacaaca gtaacttgtt tattagacag aaacttgtcg gtccttccag 1740 aatcaacttt gttcagatta gaccaagaag aaaaaaattg tgatatagat accccattag 1800 gaaatctttc caaattgatg gaaaacacgt ttgtcagcaa aaaacttcga gatttaatta 1860

```
ttgactttcg tgaacctcag tttatatcct accttagttc tgttcttcca catgatgcaa
                                                                    1920
aggatacagt tgcctgcatt ctaaagggtt tgaataagcc tcagaggcaa gcgatgaaaa
                                                                    1980
aggtacttct ttcaaaagac tacacactca tcgtgggtat gcctgggaca ggaaaaacaa
                                                                    2040
ctacgatatg tactctcgta agaattctct acgcctgtgg ttttagcgtt ttgttqacca
                                                                    2100
gctatacaca ctctgctgtt gacaatattc ttttgaagtt agccaagttt aaaataggat
                                                                    2160
ttttgcgttc gcgtcacgat tcagaaggtt catccagcta tccagcaatt tacagagcat
                                                                    2220
gaaatttgca gatcaaagtc cattaaatcc tgtagctctt ctagaagaac tctacactag
                                                                    2280
tcaacttata gatgcaacaa catgtatggg aataaaccat ccaatatttt cccgtaaaat
                                                                    2340
ttttgatttt tgtattgtgg atgaagcctc tcaaattagc caaccaattt gtctgggccc
                                                                    2400
ccttttttt tcacggagat ttgtgttagt gggggaccat cagcagcttc ctcccctggt
                                                                    2460
gctaaaccgt gaagcaagag ctcttggcat gagtgaaagc ttattcaaga ggctggagca
                                                                    2520
gaataagagt gctgttgtac agttaaccgt gcagtacaga atgaacagta aaattatgtc
                                                                    2580
cttaagtaat aagctgacct atgagggcaa gctggagtgt ggatcagaca aagtggccaa
                                                                    2640
tgcagtgata aacctacgtc actttaaaga tgtgaagctg gaactggaat tttatgctga
                                                                    2700
ctattctgat aatccttggt tgatgggagt atttgaaccc aacaatcctg tttgtttcct
                                                                    2760
taatacagac aaggttccag cgccagaaca agttgaaaaa ggtggtgtga gcaatgtaac
                                                                    2820
agaagccaaa ctcatagttt tcctaacctc catttttgtt aaggctggat gcagtccctc
                                                                    2880
tgatattggt attattgcac cgtacaggca gcaattaaag atcatcaatg atttattggc
                                                                    2940
acgttctatt gggatggtcg aagttaatac agtagacaaa taccaagata agggacaaaa
                                                                    3000
gtattgtcct agtatctttt gttagaagta ataaggatgg aactgttggt gaactcttga
                                                                    3060
aagattggcg acgtcttaat gttgctataa ccagagccaa acataaactg attcttctgg
                                                                    3120
ggtgtgtgcc ctcactaaat tgctatcctc ctttggagaa gctgcttaat catttaaact
                                                                    3180
cagaaaaatt aatcattgat cttccatcaa gagaacatga aagtctttgc cacatattgg
                                                                    3240
gtgactttca aagagaataa aacactattt cccttgcctt ttcatactag ggcagtatct
                                                                    3300
cctctagcta gtgcccatac agaaaattct atcaccatac aaaatttaat gcagtattta
                                                                    3360
tgttttaaag cacaggtgta ccgaaaactg tgaaaagtct gaatttatgg gttctatgca
                                                                    3420
tgcatttttg cctaacctag agaaagagtt tgataaattt ttaccagctt tgaagatgga
                                                                    3480
ttaacttttg actttgagct ttaaactttt aagtcagaca tttcaggact aatttgattt
                                                                    3540
tgtagatatc attgtaagaa ctttatttga aagactgaat aaagggattt gatttgtttt
                                                                    3600
catcatttaa gcacagtctt gtgatgatga gaacataagt gtgaaaaaaa aaaa
                                                                    3654
```

```
<210> 6325
<211> 2898
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (39)...(2899)
<223> similar to gil469195 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6325

tttcgtgtcg ttccgccacc tcccagtcgg gttgcggtgg aggccgttcc tggctttgta 60

gctcgctcaa gatggcggcg cagccaccc gcgggatacg cctcagcgcg ctttgcccga 120

agtttttaca tacaaattct actagtcaca cctggccatt cagtgcagtt gctgaattaa 180

tagataatgc ttatgatcct gatgtgaacg ctaaacaaat atggattgac aaaacagtga 240

taaatgacca tatatgcttg acattcaccg acaatgggaa tggtatgact tctgataaat 300

tacataaaat gctaagcttt ggcttcagtg acaaagtcac catgaatggt catgtcccag 360

ttggattata tgggaatggc ttcaagtcgg gttctatgcc gtctgggtaa agacgcaatc 420
```

```
gtttttacca aaaatggaga aagcatgagc gtgqqccttt tqtctcaqac ctaccttqqa
                                                                      480
agtcataaaa gcggagcatg ttgttgttcc aatagtggca ttcaacaagc accgacaqat
                                                                      540
gattaattta gcagaatcaa aagccagcct tgctgcaatt ctggaacatt ctctgttttc
                                                                      600
cacggaacag aagttactgg cagaacttga tgctattata ggcaaqaaqq qqacqaqqat
                                                                      660
catcatttgg aatcttagaa gctacaaaaa tgcaacagag ttcgattttg aaaaggataa
                                                                      720
atatgatatc agaattcccg aggatttaga tgagataaca gggaagaagg ggtacaagaa
                                                                      780
gcaggaaagg atggaccaga ttgcccctga gagtgactat tccctgaggg cttattgcag
                                                                      840
tatattatat ctaaagccaa gaatgcagat catcctacgt ggacagaaag tgaagacaca
                                                                      900
gctggtttcg aagagtcttg cctacatcga acgtgatgtt tatcgaccaa aatttttatc
                                                                      960
taaaacagtg agaattacct ttggattcaa ctgcagaaat aaagatcatt atgggataat
                                                                     1020
gatgtatcac agaaatagac tcatcaaagc ttatgaaaaa gttggatgtc agttaagggc
                                                                     1080
aaacaacatg ggtgttggag tggttggaat tatagagtgt aatttcctta agccaactca
                                                                     1140
taataaacaa gatttcgact atactaatga gtacagactt acaataacag cactaggaga
                                                                     1200
aaagctgaat gattactgga atgaaatgaa agtgaagaaa aatacagaat atcctctaaa
                                                                     1260
tttgccagtt gaagatatac agaagcgtcc tgatcagaca tgggttcagt gtgatgcctg
                                                                     1320
tctaaagtgg cggaaattac ctgatgggat ggatcaactt cctgaaaaat ggtattgctc
                                                                     1380
caataaccca tgacccacag ttcagaaatt gtgaggttcc agaagaacct gaagatgagg
                                                                     1440
atttggtaca tcccacttat gaaaaaacct acaaaaagac caacaaggaa aaattcagga
                                                                     1500
tcagacagcc ggaaatgatc cctcggatta atgctgaact gttgtttcgg ccaactggct
                                                                     1560
ctttcaactc caagtctttt cttctcctaa ggaaagtgtt tccaaaagaa gcatctttca
                                                                     1620
gaaggaacaa attettatge gacaagactt ctaaataate atcaagttee accteagtet
                                                                     1680
gaacctgaga gcaacagctt gaaacggaga ctttctactc gttcctcaat tttgaatgca
                                                                     1740
aagaatcgga gattggagta gtcagttttg aaaattcagt ttataaaggt ggatgatgat
                                                                     1800
gatgaagatg tcatcatctt agaagaaaac agtaccccca aacctgcagt agatcatgat
                                                                     1860
attgacatga aatcagaaca gagtcacgtt gagcaaggtg gtgttcaggt tgagtttgtg
                                                                     1920
ggtgacagtg aaccttgtgg ccagactggt tcaacaagca cctcatcatc ccgatgcgac
                                                                     1980
cagggaaata ctgcagctac ccagactgaa gtaccaagtt tagttgttaa aaaagaagaa
                                                                     2040
actgttgaag acgagataga cgtaagaaat gatgcagtga ttctgccctc ctgtgtagaa
                                                                     2100
gctgaagcaa agatacatga aacccaggaa accaccgata aatctgcaga tgatgcaggc
                                                                     2160
tgccaattac aagaactgag aaaccagcta ctccttgtca ctgaggaaaa agagaattat
                                                                     2220
aaaagacagt gtcatatgtt tactgatcaa atcaaagtgt tacaacagag gatactagaa
                                                                     2280
atgaatgaca agtatgttaa gaaagaaact tgccatcagt ccactgaaac cgatgctgta
                                                                     2340
tttttacttg aaagtattaa tggcaaatct gaaagtccag accatatggt atctcagtat
                                                                     2400
cagcaagctt tggaagaaat agaaaggctg aaaaaacaat gtagtgcttt gcaacatgta
                                                                     2460
aaggctgaat gcagccagtg ttccaataat gagagtaaaa gtgaaatgga tgagatggct
                                                                     2520
gtgcagcttg acgatgtgtt tagacaactg gacaaatgca gtattgagag ggaccagtat
                                                                     2580
aaaagtgagg ttgaattgct ggaaatggaa aagtcacaaa tccgttcaca gtgtgaagaa
                                                                    2640
ctcaaaactg aagtagaaca gttaaaatct acaaatcaac agacggcaac agatgtttca
                                                                    2700
acatcaagta acattgagga gtctgtaaat catatggatg gagaaagcct caaactccga
                                                                    2760
tctcttcgag ttaacgtagg acaactgctg gctatgattg tgcctgatct tgatcttcag
                                                                    2820
caagtgaatt acgatgttga tgtagttgat gagattttag gacaagttgt tgaacaaatg
                                                                    2880
agtgaaatca gtagtact
                                                                    2898
```

```
<210> 6326
<211> 2123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (99)...(1609)
<223> similar to gi5726241 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6326
gcgcgtttcc tgaaggtcga tggccaggtg gtcttcataa actatactgc cttgtgatgc
                                                                       60
ctccctagaa atgagaggtc tcaataccag ctcagaccat gtggaccgcg gatgagattg
                                                                      120
ctcagctatg ctatgaacac tatgggatca ggctgcccaa gaaggggaag cctgagccaa
                                                                      180
accatgagtg gacattattg gcagcggtgg tgaagataca atctccagct gacaaggcct
                                                                      240
gcgacacccc tgataagccg gtgcaagtga caaaggaagt tgtgtcaatg ggaacaggaa
                                                                      300
caaaatgcat aggacagtcc aaaatgagga agaacggaga catcctcaat gatagccatg
                                                                      360
ctgaggtcat agccagaagg agtttccaaa ggtaccttct ccaccaactc cagttggcag
                                                                      420
ccaccctgaa agaggatagc atctttgtcc caggaactca aaaaggagtg tggaaactta
                                                                      480
gacgagacct catttttgtg tttttctcca gccatacacc ctgtggggat gcctccatca
                                                                      540
ttccgatgct tgagtttgaa gatcagcctt gctgtcctgt cttcagaaat tgggccaaca
                                                                      600
actcatcagt agaagccagt agtaacctgg aagctcctgg aaatgaaaga aaatgtgaag
                                                                      660
accetgacag teetgtaace aaaaagatga ggettgagee tgggactgea geeagggagg
                                                                      720
tcaccaacgg agcagctcac catcagagtt ttggcaagca gaaaagtggc ccaatctcac
                                                                      780
caggcatcca cagctgtgat ctcactgtag agggactggc tactgtcacc agaatagccc
                                                                      840
ctggtagtgc caaagtgata gacgtttata gaactggagc caagtgtgta cctggagaag
                                                                      900
ctggagactc cggaaagccg ggtgctgcgt ttcaccaggt ggggctgctc cgagtgaagc
                                                                      960
caggccgtgg agacagaaca cgctccatgt cctgtagtga caagatggcc cgatggaacg
                                                                     1020
tecteggatg ccaaggggca etgttgatge acttgetgga agageceate tacetgteag
                                                                     1080
ctgtggtcat tgggaagtgc ccatacagcc aggaagccat gcagagagca ctgattggaa
                                                                     1140
ggtgtcagaa agtggtctgc tttaccaaaa ggcttcggag ttcaagaatt aaaaatactg
                                                                     1200
cagtcagatt tactatttga acagagccgc agtgcggtgc aggcaaaaag ggctgatagc
                                                                     1260
ccaggtcgac ttgttccttg tgggggcagc catcagctgg agtgcagttc ctgagcagcc
                                                                     1320
tttggatgtt actgccaatg gctttccaca gggaacaaca aagaaaacaa ttggaagcct
                                                                     1380
tcaggcaaga tcccaaatca gcaaagtgga actcttcaga tcattccaga agctgctaag
                                                                     1440
cagaattgca agggacaagt ggccacactc cctcagggtg cagaagctgg atacctacca
                                                                     1500
ggagtacaag gaggetgegt cetettacea ggaageetgg ageacactee ggaageaggt
                                                                     1560
gtttggatcc tggatcagaa acccaccgga ttatcaccag ttcaagtgag aaggaaatgt
                                                                     1620
ttgctctggt agcaggaccc ttcatcctga actgccttcc tccacgcagg acaagtctta
                                                                     1680
gcttttttgg tagttaaatc agggaacatt ctttctgagc tttgcatctc tgttgtgtaa
                                                                     1740
tacagatgga atctggaact tagagcaagc tatacttgat tgaagtagct ctctgctaaa
                                                                     1800
atggcatctc actaatgacc tcactatctg acttccattg tgttttattg cttctctaaa
                                                                     1860
atatgaaatc agagtttgga acatgatgct ttgaaagtac tctgcagcag ctctgtttta
                                                                     1920
tgggttccta cattgattca gcaaatattt attgagctga aatgatgttt gacgctctgc
                                                                     1980
aagttttaca gctttgccta gcatagcgaa catatatttt gtattcccag cctttctttc
                                                                     2040
ttcagggagc cattetttc ccattettca gtgatectgc tetgtgeetc agaettgget
                                                                     2100
gaaggtaacc ttactccctg gct
                                                                     2123
```

```
<210> 6327
<211> 2507
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (329)...(1496)
<223> similar to gi442368 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6327
agagagagag agatcaagag aaatcaccca gcctgtgcct ggagctacag cgaataacgg
                                                                     60
aacttgagtc tcctacaccc ctgatttgca tccctgatga taagaacagg ttggcaaaga
                                                                    120
aaatgtttac ccaaccaatt tgctgtgttt ggggagttat cagtcctcac agtccgcgat
                                                                     180
gctggcgatt accttgtaaa taatgcatgg gccacttctg gttcccagtg tgctggctgt
                                                                    240
gtgggaaagg gcaatgtctg tacgagcagg cagagaagat tgcctggcac ctactgcggc
                                                                    300
tgttttgctg aacctgttgc ccttttgaca ggtgcagaac atgtctcaat ccatagaggt
                                                                    360
cttggacagg cggacccaga gagacttgca gtacgtggag aagatggaga accaaatgaa
                                                                    420
aggactggag tccaagttca aacaggtgga ggagagtcat aagcaacacc tggccaggca
                                                                    480
gtttaaggcg ataaaagcga aaatggatga acttaggcct ttgatacctg tqttqqaaqa
                                                                    540
gtacaaggcc gatgccaaat tggtattgca gtttaaagag gaggtccaga atctgacgtc
                                                                    600
agtgcttaac gagctgcaag aggaaattgg cgcctatgac tacgatgaac ttcagagcag
                                                                    660
agtgtccaat cttgaagaaa ggctccgtgc atgcatgcaa aaactagctt gcgggaagtt
                                                                    720
gacgggcatc agtgaccccg tgactgtcaa gacctccggc tcgaggttcg gatcctggat
                                                                    780
gacagaccet etegeceetg aaggegataa eegggtgtgg tacatggaeg getateacaa
                                                                    840
caaccgcttc gtacgtgagt acaagtccat ggttgacttc atgaacacgg acaatttcac
                                                                    900
ctcccaccgt ctcccccacc cctggtcggg gcacggggtc aggtggtcta caacgggttc
                                                                    960
tattctactt tcaacaagtt ccagagccac atcattcatc caggtttgac ctgaagacag
                                                                   1020
agaccatect caagaccege ageetggaet atgeeggtta caacaacatg taccactacg
                                                                   1080
cctggggtgg ccactcggac atcgacctca tggtggacga gagcgggctg tgggccgtgt
                                                                   1140
acgccaccaa ccagaacget ggcaacatcg tggtcagtag gctggacccc gtgtccctgc
                                                                   1200
agaccetgea gacetggaac acgagetace ccaagegeag egeeggggag geetteatea
                                                                   1260
tetgeggeac getgtaegte accaaegget acteaggggg taccaaggte cactatgeat
                                                                   1320
accagaccaa tgcctccacc tatgaataca tcgacatccc attccagaac aaatactccc
                                                                   1380
acatetecat getggaetae aaceeeaagg acegggeeet gtatgeetgg aacaaeggee
                                                                   1440
accagatect etacaaegtg accetettee aegteateeg eteegaegag ttgtagetee
                                                                   1500
ctcctcctgg aagccaaggg cccacgtcct caccacaaag ggactcctgt gaaactgctg
                                                                   1560
ccaaaaagat accaataaca ctaacaatac cgatcttgaa aaatcatcag cagtgcggat
                                                                   1620
tetgacateg agggatggea ttaceteegt gttteteeet ttegageegg egggeeacag
                                                                   1680
acgtcggaag aaactcccgt atttgcagct ggaactgcag cccacggcgc cccggttttc
                                                                   1740
1800
ggccagttct caccggggaa aaacccactg ttaggatggc atgaacattt ccttagatcg
                                                                   1860
tggtcagctc cgaggaatgt ggcgtccagg ctctttgaga gccatgggct gcacccggcc
                                                                   1920
gtaggctagt gtaactcgca tcccattgca gtgccgtttc ttgactgtgt tgctgtctct
                                                                   1980
tagattaacc gtgctgaggc tccacatagc tcctggacct gtgtctagta catactgaag
                                                                   2040
cgatggtcag agtgtgtaga gtgaagttgc tgtgcccaca ttgtttgaac tcgcgtaccc
                                                                   2100
cgtagataca ttgtgcaacg ttcttctgtt attcccttga ggtggtaact tcgtatgttc
                                                                   2160
agtttatgcg atgattgttg taaatgcaat gccgtagttt ggattaataa gtggatggtt
                                                                   2220
tttgtttcta aaaagaaaaa aaaaatcagt gttcaccctt atagagacat agtcaagttc
                                                                   2280
atgttgataa taatcaaagg aattactctc ttcttgttaa attagctaaa tcatgtaacc
                                                                   2340
gcagatagga agggctcgcc tggggaaact ctggtttccg atgggacagg aaagtcatac
                                                                   2400
gggcaacagt atgcggaaag tacgtttttt aagtaaaaaa caaaggcaaa ctttgtacta
                                                                   2460
tccagttatc taaggaacaa taaaaacatt aggagataaa aaaaaaa
                                                                   2507
```

```
<210> 6328 <211> 3994
```

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (397)...(2976)
<223> similar to gi3043736 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6328 tcactccaac ggctgccggg actgatgcac aacttacaga catttttgtt ggatggaaac 60 tttctccaat cccttcctgc tgagttggag aacatgaagc agcttagtta tctgggtctt 120 tctttcaatg aatttactga cattcccgaa gtattggaga aattgactgc tgtggataaa 180 ctttgtatgt ctggaaactg tgtggagacc cttaggctac aggctttaag aaaaatgcct 240 cacattaaac atgtggatct aaggttgaac gtaattagga agctgatagc agatgaagtg 300 gactttctac agcatgttac tcagcttgac ctacgagaca ataagcttgg tgatctagat 360 gctatgattt tcaacaacat tgaagtttta cactgtgaaa ggaatcaact ggtcacatta 420 gacatetgtg getattteet aaaagegete tatgeetett etaatgaact tgtteaactt 480 gatgtttacc cagttccaaa ttatctgtcc tacatggatg tttcaaggaa ccgcttagga 540 aaatgtgcct gagtgggtat gtgaaagccg aaagctagaa gttttggata ttggccataa 600 tcaaatatgt gaacttcctg cccgcttatt ttgtaatagc agtctccgga aactactggc 660 aggacacaac cagttggcaa ggctgcctga aaggctagaa agaacctcgg tggaggtctt 720 ggatgtgcaa cacaaccagc tccttgagct cccacctaac cttctgatga aggctgacag 780 cctgagattc ctgaacgcct ctgcgaacaa actggaaagc cttcctccag ccacgctttc 840 cgaagagaca aacagtatct tacaagagtt gtatttgaca aataacagcc tcacagacaa 900 atgtgtgccc ttgttaacgg gacaccccca tttgaagatc cttcacatgg cctataaccg 960 acttcagagt tttccagcaa gtaaaatggc gaaactggag gaacttgaag aaattgatct 1020 cagtgggaat aagctgaaag ccatcccaac aacgatcatg aattgcaggc gcatgcacac 1080 cgtgattgct cactccaact gcatcgaggt ctttcccgaa gttatgcagc tcccagagat 1140 caagtgtgtg gacctgagct gtaatgagct aagtgaagtc acattaccag aaaacctgcc 1200 tcccaaactg caggagctag acctgactgg aaacccgcgc cttgtccttg atcacaaaac 1260 cctggaacta ctgaataata tccgctgttt caagattgat cagccttcta caggagacgc 1320 ttccggagcc ccagctgtat ggagtcatgg ttacactgaa gcttcggggg taaaaaacaa 1380 gttgtgtgtc gcagccctgt cggtgaataa cttctgtgac aaccgcgaag ccctgtatgg 1440 tgtgtttgac ggagaccgga atgtggaggt gccctacctt ctccagtgca ctatgagtga 1500 cattttggct gaagagctgc aaaaaaaac aaaaaacgaa gaagaataca tggtcaatac 1560 attcattgtc atgcaaagga aacttggaac tgctgggcag aagcttggtg gtgccgctgt 1620 cctttgtcat atcaagcatg accctgtgga tccaggagga tccttcacct tgacctctgc 1680 taatgtgggc aagtgccaaa cagttctctg tcgaaatgga aagccgctgc ctctgtccag 1740 atcttacatc atgagctgtg aagaagagct gaagaggatt aaacagcaca aggccattat 1800 cactgaggat ggcaaggtga acggagtgac tgagtccacg cgcatcctgg gctacacctt 1860 cctccatece agtgtggtgc ctcgcccca cgtgcagtcc gtgctcctga ctccccagga 1920 tgagttette atectaggea gtaaggggtt gtgggacage etgteegteg aggaggeegt 1980 ggaageegtg egeaaegtge eegatgeeet ggetgetgee aagaagetgt gtaeeetgge 2040 ccagagetae ggetgeeacg acageateag egetgtggtg gtgeagetea gtgteactga 2100 ggacagette tgetgetgeg ageteagege eggtgggget gtgccaccac ceagteetgg 2160 catctttect ccctcagtga acatggtgat caaggatcgg ccctcagatg ggctgggcgt 2220 gccgtcctcc agcagcggca tggcttccga gattagcagt gagctctcca cttctgagat 2280 gagcagcgag gtggggtcaa cagcctccga tgagcccccg cccggagccc taagcgagaa 2340 cagccctgcc taccccagtg agcagcgctg catgctccac cccatctgtc tgtccaactc 2400 cttccagcgc cagctatcca gcgccacgtt ctctagcgcc ttctccgaca acggccttga 2460 cagtgacgat gaggagccca tcgagggcgt cttcaccaac ggcagccggg tggaggtgga 2520 ggtggacatc cactgcagcc gggccaagga gaaggagaaa cagcagcacc tgcttcaggt 2580 gccagcagag gccagtgatg agggcattgt catcagcgcc aacgaggatg agccaggtct 2640 gcccaggaag gcagacttct ctgccgttgg gaccattggg cgccggaggg ccaatggctc 2700 tgttgcgccc caggaaagga gccacaatgt gatagaggtg gctacagacg cacctcttcg 2760 aaagcctgga ggctattttg ctgccccggc tcagccggat cctgatgatc agtttatcat 2820 acccccggag ctggaagagg aggtcaaaga aatcatgaag catcaccagg agcaacagca 2880

```
gcagcagcag ccgccaccac cccctcagct ccagccgcag ctgccgcggc actaccagct
                                                                 2940
ggaccagetg ccagattatt acgacacgcc actatgaccc agccgagetg tttaacaaat
                                                                 3000
aaactaacca caaaagactg agttgcaaga gtctcccagg ctcacattaa accaggggtt
                                                                 3060
ttactccaca tccttccccc agacactgtt cccaacctgt catcgcagct aatctgtagg
                                                                 3120
ttctctttct ttgggttatt tttttaagta atcaccactt tcttctagtg atgctttacc
                                                                 3180
aatatgattt acatttgtta acttctcccc ctaacatatc agatatgtaa agacaaagaa
                                                                 3240
caaaaggttt aatattac agagaaacag ttaatgataa tgtaatattt tttaaaatqq
                                                                 3300
ctttttgttg tttgtttgga aggcagggca ggctgccgtt gctaaatgat ttaataatat
                                                                 3360
3420
tgtttttgtc ttgaaaataa tagacatttg tagaatatgg agactaactc ctaggagttg
                                                                 3480
ctttactctg tcaggtgact taagtcactg ggattcacta attttctctg agagaacagc
                                                                 3540
tgattgagaa tttccattgt aaatagctca gtgttgtata gtgaggctta cgatgttttg
                                                                 3600
tagtottggc gtaaggacac agcccaagta actgacgttt cccctcccc tcccctctqa
                                                                 3660
ggagcctgcc tgcctcacaa ctcaccctca cttcactgaa tgaggaggct gagcagctgc
                                                                 3720
agtgtttctg tccggaggaa atggatctta ggccactgga caagaacctg cacccaaggg
                                                                 3780
ccctgaaccc attttcctcc cctgtcccag ccttcccact ttgacagaca cttttaactg
                                                                 3840
tgttccttac tgctgccaca atcagcatgg ttgtatagtg ccccattagg ccatttacat
                                                                 3900
acccagagtt atactcaagc agaatgcaca aatggacatg tcataatttt tgttacaata
                                                                 3960
aatatgaaat ttacaagtaa aaaaaaaaa aagg
                                                                 3994
```

```
<210> 6329
<211> 4120
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3909)...(89)
<223> similar to gi4529896 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6329 ttttttttt ttgtgggaaa atattttatt gctgccatcc ccatggtgag ccgctggggg 60 tgaggggtga agctgggtgg tggatcacag catcttctgg aatagggcga tggcctcatc 120 cacctteetg agetetgett etgtetgttg gagettgget teatetgeet eetggaette 180 gaageggeae ettgacagga ttaccegagg caggeaegge gtgteeegea gaegettggg 240 cctgccgctt gggcctcaac tcgcttggct ttgcaacttg cccaagctcc cgtgcagggt 300 ccaacagccc cttgaagctg caggtgggat ggagcagcga tcagaagcca gagccacagc 360 gcaaccetgg ggggggggg agcccccagg gctcagcaac agccaccaca acctgcgctt 420 ggccagggcc ttgcacgtag cccgacaccg ccgatgccag ggcgcccgtg gcctcgatcc 480 gccacttcca ggaaacaagt aggcccggat tccgggtgaa ggttgtagtc ggcccgcagg 540 aggccgcacg gctcgcgtga tgcttagcgc cagctcaagg gcggcttctg cctcggggtc 600 cttccaggag cactctgagg gctccgggta gggggtaaca cagaggctag ggggagcttg 660 cggcatcete cggggcagec tetggaacag etectecgte acgaagggca tgaagggtga 720 gagcagccgc aggccaacgt ccaggcaagt gtacagggtc tggcgggcac actcagctgc 780 cacctggtcc accccattca gtacaggttt caggcactcc aagtagacat cacagagctc 840 atagagecag aagetgtaet gggeagtggt gaeggeeggg aagtegtagg eetggaagee 900 ttgattgctg agcctcacag cctctgtcag gcggctgcgg atccagcggt ccaccaggct 960 ctcatggcct ccgggctggg aggtgggtga gggcacaaaa cccttcccaa ggccacgaag 1020 ggcaaacttg gtggcattcc agagcttgtt gcagaagtgg cggtaaccca gtatccggtt 1080

cacatccagg	ttgatgtcac	gaccctggga	catgtaggca	cataatccaa	accggagagc	1140
atcggtgcca	cattcaggaa	tccccgctgg	gaagtcagct	ttctgccctt	ctttggcctt	1200
			cagcagctgg			1260
			gacattgcct			1320
			gtagacctct			1380
gagcttcagg	cccagcatga	ccatccgggc	cacccagaag	aagaggatgt	catgaccggt	1440
ctccagcagt	gtcccggggt	agaacacact	caggtcttct	gactggttgg	gccagcccaa	1500
aatggataag	gggaagaggc	cagaggagaa	ccaggtatcc	aatacatcct	catcttgctg	1560
gagactgatc	ttgtcagggg	acactccgaa	ctccttggct	gccttctccc	gggcctccgc	1620
ctcattgcgt	ccactcaccc	agtaccgccc	atcagggtcc	tccccagggg	gcaccgctgg	1680
gtcactgaca	gtgacaaagt	aggctgggat	gccgatgggc	cccaccacag	cttgcctggg	1740
aacatgcacc	acttcccgga	tgttgtccat	ccaggcatgc	catgtgcgct	gatggcgctc	1800
aggcaggatg	cggaggtcac	cccgagtcac	agcggcgctg	gcagcctggg	ccatctcccc	1860
gcagcgaacg	taccactgcg	gccgcagcag	aggctctacc	acgtccttcg	accggttgca	1920
aagtggcacc	accatggggt	tgtcctcaat	gccacggaac	agtccccgct	ccttcagcgc	1980
caccagcacc	gctttcctgg	cctcaaacct	gggcaggccc	aggaaaggcg	gaggcacatt	2040
gatgagggcc	ccccgggagt	ccatgatgct	gatggcctcc	agcccgtgcc	gctgcccaac	2100
ttcatagtca	ttttggtcat	gtgcgggggt	gatcttcaca	gcacctgtgc	caaagtccat	2160
gtccacaaat	tcatcgaaga	caatgggaag	gctccgagac	aggaatgggt	ggatcacqtt	2220
cttccccttc	aggtgctggt	atctggtatc	tttggggtgc	acagctacag	ccacatctcc	2280
cagcattgtc	tcgatccgag	ttgttgccac	caccacctcc	tcgtcgctat	ctgagccttg	2340
gaccttatag	gcaaaggaca	cgaggacccc	gaactccacc	ttctccttgt	agccaggcac	2400
ggagagcagg	gtgcgacctg	tcagctcctt	cttatccacc	tcaatgtcag	agatggcgga	2460
gttgagggtg	caggaccagt	taacaaggcg	ggtactgcga	tagatgatgc	cttcctcqtq	2520
aagccggaca	aaggcctctg	tcacagetge	tgagagttta	gggtccatqq	tgaaacaggc	2580
tcgatcccag	tccaaggagc	tgccaagctt	cttcaactgg	tggtaaatcc	ggtcaccttt	2640
ctcctccttc	cacttccaga	cttcctgtag	aaaggcctcg	cggcccagct	ggtgccggct	2700
cagtccctgc	tcacgccata	gcttcttctc	caccaccacc	tgggtggcaa	tacctqcatq	2760
gtcacagcca	gggttccaca	gggtggtctc	cccacgcatg	cggtgccatc	gagtcaggga	2820
gtcctggatg	gcgttggtga	gtgcatggcc	caggtgcagg	gagcctgtca	cattqqqqqq	2880
tgggatgcac	atcatgaaga	cacctcgggg	atttgctgct	gacacattag	gacqcccata	2940
ctctggcttg	aagaagccct	gctgctccca	ccaagggtac	caggcagcct	ccacataccq	3000
agggctgtag	gagtcgggca	tggggccact	gacatctttc	ttttccccgg	gtggggttgg	3060
gaggtcatag	gtaatgaccc	caggateceg	tttctccctc	ttctctggtt	ttggtttctt	3120
ctcccctgga	ggtggctgct	gctgttggat	cttctgcttc	tgttggaatt	tctctagctt	3180
ctcccgtttc	tttgcctctt	tcttgagctg	agcagctgtc	tttgggaggg	caggageete	3240
ggggcctggc	tgatgagaga	gaggcctggc	tcctgagtat	agaaccactt	ctcctaqcac	3300
ggctcggaat	tctggctgcc	ggacacacgt	gacaaaccag	cgagtcacat	tattccagat	3360
ccggcgggca	ggtgggtcta	ggacgtatcg	gaaaggcagc	agcaaggctg	tgacageege	3420
			caagtaggtg			3480
caaggggctc	agggccctgc	ccagggcccc	cagcacagcc	tgggggtcct	gggccgagct	3540
tcggagtccc	agggccggca	gcgttgctcc	acaggcagct	ggtattaact	ccatatcaac	3600
gtaactgacc	cactgttgga	caaggacagc	cgcccggctg	cccctgggc	ccccaqqcc	3660
tgctggccac	agcagctggg	ccacagccgt	ggcccccac	acccagagcc	caccqqqccc	3720
ctgctccagg	gccggcaggc	ggggtgggg	aaagctagtc	ctgctagtcg	gagataacta	3780
gagacagatg	cgggggtggg	ctcctcccca	tccgggaccc	tccccagcct	ccccatagcg	3840
agcggctatg	agggctcgga	ggctggggaa	ggcatctggg	tgaggggaga	cgtagagggt	3900
ggacatagtt	atgagaaggt	ccgaacgaag	tggaaaaact	ggagggagat	ggtcagactg	3960
ggccgggaat	ccacctcaca	gccaggcgcc	ggccgcggct	ggaccggccg	agcggcccgg	4020
gcggaggagt	cgagcgggca	gagacggtgg	gcggctctcc	aggtgaccct	agttccctaa	4080
gatcgccgcc	ccggcagccg	gcgcccacgt	gttccccct		=	4120

```
<211> 1880
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1689)...(1380)
<223> similar to gi347457 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6330
ttttttttt ttaacagtta aacttttata tttacaatat tctcttcatc ttttgccagg
                                                                      60
tttaaaaatg tgtacagagc cgcaaagggt tggggtaggg ataagggatt gtcgggattg
                                                                      120
ttttggggag aggagctggg cattggagtc cgtggctgaa tcatggggtc ccccagcccc
                                                                      180
cctcccatgc cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc
                                                                      240
atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa
                                                                      300
taactaattt tccatggatg gaggtaggaa gagaagggac agtcaagagg caaagttctg
                                                                      360
ggactcaaga ccagggattc tggatttggg tgtcagtgga agacagcacc ccagccccta
                                                                      420
ttcaagtttg gcactaacac cccacaaaat gccagcagat gaggactctc ccctcgtcca
                                                                      480
ctgtgtccct taagcccttc cagacatcat tcttttccca aatgcccaag cccaaggccc
                                                                      540
teeggggagt caceteacae attteaaatt atteetgetg gtgtetgeec aageeetgte
                                                                     600
cccactgccc cctccatctg ttccccagca ccgctgacct cattctccca acctgtccgg
                                                                     660
tgagacettt etececactg ecteceteca ceatteaagg eteettett teagacaagg
                                                                      720
agggggggtg ggtcagagga gggtggtcag ctgaggagaa ggctggtctg acactgagat
                                                                      780
ggggacagct tcaaagaggg ggacggagat gaaggggaac ggagaactga ggcagggtgg
                                                                     840
gggagacatg gtgaggagaa ggggcacagg cgggagccc ctcacctqcc acatccctcg
                                                                     900
ccctgtatcc tgcttgccct tagtttcccc tgccctgcct gggaccggga aattcttggc
                                                                     960
acattttggg agtctctccg ctcaaatcca cctacccagt ttggcacgga tgagcaatgc
                                                                    1020
tctgaggcct ggggaaaagg ctgtcctcgg accacaatga gggctttggt caaacatgcg
                                                                    1080
tggcctctgc ggggggcacg ttgccacacc ccctccccc aactcgggag caagggccgg
                                                                    1140
gesteesteg gggtttgtts accetestea getestgesa actagaagts tgtgstsacs
                                                                    1200
tgccatgtga ggaggaactg ggtgctgggc ctgaggcctg ggggaggcag ggaagtgctg
                                                                    1260
ggaagaggg ggccgtctgc ctggggaaac acacatccac atgcaagaac ctgtttccac
                                                                    1320
tcagagaaat gcgtcctggc cacgggaaaa taagcttcca ggcagcatca ggatgcgtgg
                                                                    1380
actecteect ecceeageag gaaatetgtg tetgteetet etggaaggtg agggeeteec
                                                                    1440
cggcagaacg tgcttcatct gacttgtgcc aaggggggcg tcgggggggaa catgcttcgc
                                                                    1500
cggggtaggg gcaagggagg caggggcgag ggggctgtga tttcctcgct gcttcccagg
                                                                    1560
ctccatcctc tgtggtcttg gtggccaagg gtccctgtat gtgaacacac cacttccagg
                                                                    1620
gtctccaggg ggagggaaag gggaggaggt ggaaaaaggg atgggggaac aggattttgg
                                                                    1680
ggtacaaatc cccacagaaa ttctttgagg gggccaacat gtgtccaggg tggcaaaaaa
                                                                    1740
aaacctcacc ctgcacatgg gaaaacacac cccgttgtga gaaagcacac ctccacgcgg
                                                                    1800
gaaaatacca cattccacac accgaagact ggtgtcccaa tgggggggag aaaacgcccc
                                                                    1860
ccagttgttc aaaggccccc
                                                                    1880
```

```
<210> 6331
<211> 2829
<212> DNA
<213> Homo sapiens
<220>
```

```
<221> misc_feature
<222> (1)...(2830)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2633)...(514)
<223> similar to gi2880079 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6331 ttttgagttt aaccccaaaa tgtatttgtc cttagaaaag aggtccacat actcactgtg 60 tctactctac agaatttgtc cattttatta caccacgtgt caattcaagt ttatctggtc 120 actgcaaaaa ctcgtggcta atatgtgtaa tacaacacag gaggaggtat tgctcagttc 180 aactactctt atttacttaa aaaaaataca gaaatgtttt tgtccacttg aactgtagtc 240 cagacataaa agttacatga aagttttaga aaatggagtt attttatttg gttgccacag 300 taccccttga agccagttac ttaaaatgct gaagttgtac atatttccat tggtcaqqaq 360 cagcattggt gaagcttaaa cttctctctc gaaagtaatc tttttttact tttttgtttg 420 tttgtttgtt ttgttttgtt tttagcacaa ctgcagtctt tcgctttttt tttttttqtt 480 catttttgga gtaggtttcc ttggtggttt ttaggacata tttgttggta aacctataac 540 agttgctttt actttcagtg atgtactttt ttcttttcct gcttcccaga gatttatcag 600 aggaggataa ageteaceta atgeaaaggt tggtttetgt aagtaattee teacataget 660 gtgtccacca tcacagttca tttctggaga gaggcagctg ataagacata tcacaccaat 720 aatccccaga aggcctccaa gacaggccat aagtgttgtg gtattattct tttcatactc 780 tttttgatca gggtgcaaac ctttggtggt gacatttaca cattttttc tgtttttctg 840 atagatggtg ggaatatcaa tacaaatttt atactcagtt gatggattca gatgagtaag 900 attatatacc ttgacatcag atggtattcg agcactttgc gcagcatgag aattttcagt 960 cttgacaaag gctgtccatt taacactaga tttgagaatt ttagaacttg ctttccagga 1020 caccaaaact gaattggcct gaatatctct tattttaata ttcaaagagc cattgttatc 1080 ttgtggaaaa gatccatcca ctttgatcat aacagacttc aagtcagcgc caactaggtt 1140 agttgctata caagtatata aacccccttc tttgggagtt acgccattta tatctagtgt 1200 tccctcagaa tggacataga acttgtctgt caggggtatt aggcaaqagt ttttqaccag 1260 aaggtgttat ccagtagatt tcaggctgtg gttcatgcag tagctctaca gtgaaaggaa 1320 acatagetee cagettetae atttagatta gaaggaaage teteaggage tataagaggg 1380 agacaaattt ccatcatgtc cctgaaatgc acttgccgaa cattctgacc ttggaattca 1440 ggtgggtcca cgcaaaacag tgaatctggc tccatgaatc gaatgttggt tttgttcatg 1500 ttcatccaac ggatgacaca gtcacacctg atggggttac tgtgtatgct gatttccttg 1560 aggtttggca gagactcaat ggtaccatgg tacagggcac tgagagcatt gctgttcagc 1620 atgagtgatt ccagcttggg gagtctgaaa aatgcattgg ggtgaatgta agacaatcta 1680 gggttgttag tagcttctat ttttcttaaa tctggcaggt tatccacagc aagactatcq 1740 atggaaatca gctcaggcat attatttatc cccaactctt ttaagtgtag catattgcta 1800 aaatcacccc ttcgtattct attaatagga tttttattta gatccaaaaa tttgagattt 1860 acaacttttt gaagagcaac atggggtact ttaataagcc tgttatcgta aaaagagatg 1920 ctttctaagt tttccagtcc aaccaaggcg ttatctggta tttctgtgag gtttatacca 1980 gctataacca ggctgcgaag attgataaga ggcttaaagt tcatgtcttt gattctgata 2040 attggatttt ccccaatcat cagaatctct agatttggaa gagcatcaaa ccacttactg 2100 ttgatcatct gcaatctatt tgaattgaga tgaagtcgaa gaagattatg taggccaata 2160 aaggeteeag gtgaaattgt agaaageaag ttgtgattaa tatagagtte ttgtaagttg 2220 ctcagttcgg acagacattt ttcaggcagt tcagtaagtt tgttttcctc taggtacaca 2280 gaaaggagct gaggcatctt ttttccatta atattggtga ctgaagataa attgttttga 2340 gataaatcca ggccagtaag gtttactgga aagtctgtgg agtattcaat ttttgcaata 2400 ttgttagtct gtaggagaag aatctgtgtg ttagctggca atctggctgg gaaagttaaa 2460 agacctaaat cattacaatc cactgtagat gcttccatat aaatggatct gggtgtaaac 2520 caaggeetga tttcacaegt acataacegt ggacaateca etttttate tacagettgt 2580

```
actagtgtag tgatagctag gccaagtagc acatgaattc ggagtggcat gtccttcatc 2640 ttagctttct tcttcagaaa tgtaatgggc ccttaaggat tccacagtca gtgctagtaa 2700 gttcaatagg agctgattga taaggaagat gcttgcattt gtcaaatgat gaatgccata 2760 gaaccacaaa gttttcttn actgaaataa gtgccagtgc cacanttgca ttgtccaaaa 2820 atgtcatgc 2829
```

```
<210> 6332
<211> 4666
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (45)...(1880)
<223> similar to gi762953 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6332 tttgacaacg ctagtcgatg accactccag cttggcacga ggggcaacca gggcctggtg 60 geceaceetg eegeetetgt ggagaggeet eeegaggeeg ggeeceatee egagatgaag 120 gggccctctt attgggctca cgtcggcccc gccgggatgc tgctgagcga tgtgctgcag 180 ccctgatggc cagccggcgt aagagtgaag ccaagcagat gcccagagct gcacctgcca 240 ctcgggtaac acgccggagc acacaggaga gcctgacagc aggcggaaca gaccttaaga 300 gggagetgea ecceecagee aceteceatg aggeteetgg caccaagegg teacettetg 360 ctccagcage cacctectet gestettett stacatests atacaaacgg geaccageta 420 gctcagcccc acagcctaag cccctaaagc gtttcaagcg agctgcaggg aagaagggtg 480 ctcgcacccg tcaggggcct ggtgcagagt ctgaagacct gtatgacttc gtttttattg 540 tggctggcga gaaggaggat ggcgaagaga tggagattgg ggaagtggct tgtggagctt 600 tggatggatc acateceage tgcetgggge ttccagcact ggaagettca caaagattce 660 gcagcatete cacettggag ctatteacag ttecaetete cacagaggea gecetgacae 720 tatgccacct gctgagctcc tgggtgtcac tggagagcct cacactctcc tacaatggcc 780 tgggctctaa catcttccgc ctgctagaca gcctgcgggc cctgtcaggc caggctggat 840 gtcgcctccg tgccctgcat ctcagtgacc tgttctcacc actgcccatc ctggagctga 900 cacgtgctat cgtgcgagca ctgcccctgc tacgggtcct ctctattcgt gttgaccacc 960 caagccagcg ggacaaccct ggtgtgccag ggaatgcagg gccccctagc cacataatag 1020 gcgatgagga gataccagaa aactgcctgg agcagttgga gatgggattt ccacggggag 1080 cccagccage cccactgctg tgctccgttc tgaaggcctc gggttctctg cagcagctgt 1140 ccctggatag tgccaccttt gcctctcccc aggattttgg gcttgttttg caaacactca 1200 aagagtacaa cctagccctg aaaagactga gcttccatga catgaatctc gctgactgtc 1260 agagcgaggt gctctttttg ctacagaatc tgactctgca agagattacc ttctccttct 1320 gccgtctgtt tgagaagcgc ccagcccaat ttctgcctga gatggttgct gctatgaagg 1380 gcaactccac actgaagggc ctccggctgc cagggaaccg cctgggggaat gctggcctgc 1440 tggccttggc agatgttttc tcagaggatt catcctcctc tctctgtcag ctggacatca 1500 gttccaactg catcaagcca gatgggcttc tggagttcgc caagcggctg gagcgctggg 1560 gccgtggagc ctttggtcac ctgcgcctct tccaaaactg gctggaccag gatgcagtca 1620 cagccaggga agccatccgg cggctccggg ctacctgcca tgtggttagc gactcatggg 1680 actcatccca ggccttcgca gattatgtta gcaccatgtg atggggcccg tacctcacag 1740 tctcatgctc ggtaccatca gcttgcaggg gctgaagcat gggctgccca gaaccccaac 1800 caccagttct atctttctct ttctgtcacc ttttttctct tttttccttc ttcccttgca 1860 ctgaggtcct ggaggccttg atgaggccca gcaaacaggc attctcacag ctgggtttat 1920

```
agtetttggg eccettaete agtateetgg ggaaceetgg geccagggag gtttaeagtg
                                                                     1980
gtcatcataa ttggttgaaa gagatcccct cccctggcc ctggggttcc tgccttccct
                                                                     2040
cctcaagcag ggcacccagg gctttaggag aagtataggg gggcttcttt ccctgctggg
                                                                     2100
getttaccae atggetette agggeeteaa aaccetttte atacetttat tettttttt
                                                                     2160
aaccaaaaaa gtttttctta taaaataaat tttgggcaaa catcatgcac ccctttttga
                                                                     2220
tgattttttc ccaaaaaaca aaattcaaca gggccctgtg gagcaaggag ccccttttcc
                                                                     2280
ctatctcctt cctctaagag ctacacccag accagctggt tatcagcgga ggccccgctg
                                                                     2340
ctcctcatga gaacgctggt ggaagacgaa ggtgatggca gtggaggcag catcccaggc
                                                                     2400
agectggagt accteatece ggagececea ettateagtg caggggttee accetgecag
                                                                     2460
gtctgaagtg cagtcagaac catcaggggg tggccggatc tgacggctgt tgacacaacg
                                                                     2520
teggeagtge aacetgteat gtgtgteact gaggetaget teatecagga taaacagete
                                                                     2580
cttcaactcg cccagagaga agtggcgctc tacatcctgc tcctcatcca ccacacagct
                                                                     2640
getcagtgcc ttettgtggc tetgacgetg gaagatette teetcaatgg teeetgcaga
                                                                     2700
cagcaggcgg tagatatagc aagtetteet ttgaccatet cgccagacce gggccatgge
                                                                     2760
ttgttcatca ttggctgggt tccagtcagg gtcaaacatg accagccggt tagccccaat
                                                                     2820
gagattgagg ccacagcccc cagctttgct gctcagcatg aagacaaagt cagggctcga
                                                                     2880
tggactattg aagcgttcta caaccttggc tcgcttctta atggacatcg tgccatccag
                                                                     2940
gcggacgtat aagtaccttc gggcacggca cagcttctca aagagatcca aagtctgggt
                                                                     3000
gtaattcgac accagcacta ctttgtcact gctacggctt cgggtcaccg ccagaatata
                                                                     3060
atccaggacc agcatcttac ctgacagctg gggctccagg gccttagagc tgtaaccagg
                                                                     3120
agggaagagg tccaaggcac ccacaaagcc atcctcctct tccacacact tatcatagat
                                                                     3180
tagagctgga tgattacaaa gcttctttag cgaggtgatg gaagaaaggg aagacacact
                                                                     3240
catcttgccc tcaagcaatt cttctgccgg tttggcttgt ctcagaaacc tcttgtataa
                                                                     3300
ctcagtctga aggggtgtca gcctacaaca aacgacctgc tcaatcttca caggcagata
                                                                     3360
tttagaaagg atatcagaag tcctccgtat caggcatcta ttcacaatgc tggtgagctc
                                                                     3420
ccgcagccgc tectetecta getgeetgte tgcctcacta geagcagcgt etcgaccett
                                                                     3480
caaaattggc aattcaaaat gcttcttgaa ttcatgggca gtccctagga tgccggaatt
                                                                     3540
aacaaaatgt accaagctga aatactcaag cagatcattc tggatgggag ttccggagat
                                                                     3600
gagcacccgc cggctggtgt tcaagctgtc cagggcttgg taagtctgat tctcagagtt
                                                                     3660
cttgagcctg tgtccctcgt cacatatgac cagaccaaca cttcctttct ggaggactcc
                                                                     3720
aacatgaagg cggaaggtct cataggaaat gatgaggatg ggagaagaca ccctggctcc
                                                                     3780
acgctggttc atgaatcctt ccagcttttg gtctatttca tccttagatc ctccatcgat
                                                                     3840
ggccagaggt tggatcctcc ctccgagcca tttcccaacc tcattgtacc agttcttcac
                                                                     3900
caggetggaa ggegacacca ccaetgeett gteaatttet ggettgeact etggactetg
                                                                     3960
gcgtaaaagt gtccacatca atgtgatgca ctgcagcgtc tttcctaggc ccatctcatc
                                                                     4020
agccatgatg cagccatggc tgccagggat gcgccgactg gtgacacact cccacaggaa
                                                                     4080
tttcactccc tctctctgat gaggccgcaa aaccttactg agaatagggt caacaaccac
                                                                     4140
atggacaggg agtttctcct tgtcaagctt cagctggtca tgagcgctca gcgggggagg
                                                                     4200
ctcatacaga accaaggcat ctttttccag ggggtcatgg agggcccggc ggaccccagc
                                                                     4260
ccttttcagg cccaatgctc gagagcccag aggaccttga taatttggaa tggggacttt
                                                                     4320
gaaaggettt gacaaaatge ttegaataaa tgetteatge tgactgetgt ceagacaagg
                                                                     4380
tggttgattg gttagctgac tcaaaggttt ccgaaaagga gacaggaaac actcctggat
                                                                     4440
ctgggtctca ctgctggatt tccgtttcct aggagtcact aggccaggtt gccagtcttc
                                                                     4500
atcatcacag gacctgcctt caggttttct cttggccagc tggctgggag ccaagctcct
                                                                     4560
cctcatcctg ggcctaggag tttaaaacgt caagtaccca tgagccaaag gtcaaaagca
                                                                     4620
ggcagcggct aagagtgtag gaccagggtc taatctgccc gaattc
                                                                     4666
```

```
<210> 6333
```

<211> 5254

<212> DNA

<213> Homo sapiens

<221> misc_feature <222> (4976)...(4328) <223> similar to gi529707 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 6333 tttttttttt ttcacaatgt cagatcattt atttcagagc agttacaccc agcagaaggg 60 gaacaggett aaacgeggge atataagttt teeegeacge aageeetgea tggegttggg 120 ctgggaagec ggggegttge aattetgeaa aacgecaege tetactagge eccettaete 180 ctaattaatt gcctgctcac cagactgtga gaaaataatt gccactataa attttccctc 240 cttctgcata aaatattcgg gggaacccag ccctaaaaaa acagaccttc atgaaagaaa 300 gggcagccaa gcgtggatgc tgcgccccc acaaccccca ctgcagagga cacagagagg 360 ccaggagccc cctttctggg ttccccctgg gttccaaatg aaacagaaag gctcaaagag 420 ctcccaggaa tggtcacagc tgaaaaaaaa gtcgagtgag tggctacatg cggcaqccgc 480 ttgtgttcac ctgccgtcca cccaggacag tccccggcag cagcttgtgt tcacctgccc 540 tecacecagg acagteceeg geageagett gtgtteacet geeetecace caggacagte 600 cccgggctgg ctccaggctg cagggggtca gcagagggag cctcctgccc catatccttg 660 gcaaactcac ttctccttct gggaccacac aagagacatg ggagaatgtt cctaattagg 720 caagagcaca gaacccctaa tcccagtctc tgcttggcat gagtacccag gcaggcaagg 780 aagatggaga caggtggatt tcagctcctg gaaggagccc cggctcagag tggctgctga 840 gtacccagcc ttgccctcct ctgacgtggg aacgggtgtg gctgtgctgc cacctggtgg 900 cetetteeet caetgeaggg tgaaatgatg tggatgeeag ceettaggtg tgggeteeag 960 ctggggtcac agagcatccc agccctcagc actgcccgac atagagggaa cccctaccac 1020 tggccctatg tggcctgggg gtgagagacc cccccccaa aagcgaggga cttcaggcca 1080 ctgacaccgt ggaaggacca caacagaccc caccccagac cagccgcagg atgacccaag 1140 gccgtggggt ccagacacca caccaggaag cctcccaggc agcccaggtg tagcagaggc 1200 tgtgcagctg cagcggcctg ggcagagaag aaagagcagg aaggacagag gaaggcgcct 1260 gtggtgaaga ccctgcctcc ctcacgcccc cacgcacctg tgctgactgc tgctcaaggg 1320 gtcagcctgg aggtcttccc ggtgcttgga cgaggctgag aagggaggac gtgaaggaac 1380 agagtagetg gaaaageeee egegggteet geageteetg caeteagget ggggetggge 1440 tggcgcgggg ggcaggtgct gcttcctgcc tggactgacc tgctacccca gcctgaaggg 1500 cggcttgtcc agagcccacg gcctctcgct gggcagaggc agggccacag cgcagactgc 1560 ctcacageca cttccctgca tgcccacage ccggaagaga cgccgcagag ccaggggctg 1620 ctgaaaacgc tccggagatg acctcacact cagcagcaca gtaaattgcc aacgccagga 1680 aacacggage agetgggget ggcccacgtg gaggcacgaa gccagcgccg getggcccag 1740 aatgcccact cctcagggaa aagggccttc cacactggga ggacggttct ccagggcatc 1800 etetecegee atecegeagg cageeecace ceaggagetg etgtageteg teeteatget 1860 cagaaatgtc tcggcgcctg ctccaaagcc tacctgccac aatctaagac cctttctaat 1920 agtttcatct gcaggaaaga aaatcatcat tctcggcatc agcatcttgc agcctattag 1980 gaaatateet ttatggaatg ttetgttete aactteteee eteettteat ttteaeetgg 2040 gaaccaggta ccgtggggag ggacaaggca gaaacagaaa gcccgccact cgcctcqcaq 2100 tgaccaacgc tgcgatccca ctgcttggtt tcctgtttcc atcgccccc accagaaagc 2160 cacagcaete ageceggggt eteceaecee ageceeggga eegggaeete getgeeaetg 2220 tggggcactt aggcagggtc cagcgcaggc caggggcaga cagccgggaa gaggccttca 2280 gcccgaggcc agggagacca cccggcctta gcatccgctc atgcaggggc tgaataaagc 2340 agaactgccc tgccccactc ggcctgaggt acccggaacc cttccttggg gacaggctcc 2400 accagaaatt ccatgcgacg atcctggccg ggcccggcgg cttccaccag caggtccact 2460 atcoggtact gggtggcaaa agccaaccc aggaacatgg gcatctctgg cctcggcagc 2520 tecetgeeeg gagagteate acteateeet eeccageagt ggatteggaa geaaeggaet 2580 tgtgagagga ggaaggacca gtgcagggtg cagctgagct ggagcagagc agggggcccc 2640 tecegeteag aggeggatgg etgecagegg atgtgagaga tggtgaegge etgeacetgg 2700 ggcagagggg ccagcaggct ggcagcgtcc accacctgga tctctccaag ccgacaggtg 2760 aagctctcct cctcccgact acccggcggc cgtgagaagc aaacgaggag gtctagcagc 2820 aggcacccac gcaggetcac etegtagcag tgetggacce agececcact cagetgeegg 2880

```
cegeagegge ceacecatet ggeeagettg gtggggggea ceeggagggg teggaggetq
                                                                     2940
tgtcttgagc ttgtttctgc gttcaacact gagatgccac cgatgtggca gctgccggca
                                                                     3000
teceetgtgg teageteeaa ageaactgtg aegteegtgg geceeteaag ettatacace
                                                                     3060
atggacaggt aaatcttggg tggcactggg gcctgcgggg aaaataacct cacaqccaca
                                                                     3120
tttccaacct ccggtgggat cacaccccgg acgagcaggg agctgcctcc gtgccaggca
                                                                     3180
tectecagge ageagtgegt ceteacecag ecceggeeat ecceteceag cetqtqttet
                                                                     3240
ccaaacaagg gctggatctc ctgggcgctc aggtggtacc agggccctac cgcctcttcc
                                                                     3300
tggccatagc agaccetecg tgcacceatg cccaggcaga aggacgtgac gaaaggcaag
                                                                     3360
gagcagatgc tatgtgtggg cagataacgc tccagtcggc cccagaactt gtcctggttc
                                                                     3420
tggaagaaat cettettete cagacactea tacacccage egggggcaaa caaaqccaeq
                                                                     3480
gagaagccat gctttcggat cagctccaac gactggaggc tgctgggcat caccccgtc
                                                                     3540
gttccacaag cccgccagaa gagggcgcgg gagaggcggt cagcgctgct gcaagggcag
                                                                     3600
99999caggg gctgggcccc aactggctgt ggctqcqcqq tcccattqtc ctctqqcaca
                                                                     3660
cctctcattc gattatcaga atcacgggca gtaaagaggc tctttagtta ttggattaat
                                                                     3720
ttactcattt aaagctaaat taagggctga gaacatccct ggggctctgg gaacgggcag
                                                                     3780
gactgataga ccagaggcag gcagagccct gcgcatccca cgccaggggc accggcctqq
                                                                     3840
cecegeteet teetetgtge tggtgtgace tgeettgeea gaaaatgete cetegteatg
                                                                     3900
acacctaccg atccccaaac cctgggcacc tcccccgtcc tcgcccctga gccgcagtga
                                                                     3960
gaggcgctgc aggcccctgt gcgtccccgc aggcttccct cacggggaag atcaaggaac
                                                                    4020
gcagctggga caggaggccc aggcccgccg aggaccggac agcgggggaa cgacgcgcct
                                                                    4080
ctgtctggta acacccacac aaaaatacat tatctgattg tagaaatagc cgggaaaggg
                                                                    4140
gtttcagtgg ggacataget tggccggggc aggacacetg tttctcagtg ccacgggate
                                                                    4200
cccactctgg gaagaacagc tgctgtcatt cctttgaggt gcagacggga atggaaggtc
                                                                    4260
catgaggaaa tgaggtccca ggggaggcac tgggccgctg gcccttggac gaaagccacc
                                                                    4320
acceaecttg tetgtgtega ateggeetee gaccaegtte eetegageaa acaeateeae
                                                                    4380
gcccacgtac acatcagece ggcgctcccc agcctgcccc agcatccgct ccaagtgctc
                                                                    4440
ctcccgccag ttatagttag tgaagaagcc gtcgcaggaa tcaaagaaga ccctgttgtg
                                                                    4500
ctggttgagt tcgtcttgcc atttgagctg cccactttgc accacgctgt cataccagag
                                                                    4560
caccaggeee eetgggaeet geeggtgeag etgtgtggtg aggtacegea ggaaaggagg
                                                                    4620
catgiticece acageggeea gacteagega gittetegatg tigateagee agecateaaa
                                                                    4680
acgaaaaaac ctgagtgatc tggaccagcc ggtcagccac tgcctggtac gagcgctcat
                                                                    4740
ecceggecag gaaggettea cagageette eccetteatt ecacteegtg atgaaagtee
                                                                    4800
ccagcacgca gaccccatgc ctgtgggcag tgttggtcca gcccactggg ggaatggtga
                                                                    4860
cggtgtggtg gctgaagtac acaaagacgt cgatgcactg ccagtggtag aaagcatagg
                                                                    4920
gagtetgeac cacegagece tgaatgaace tgteatecag gtaceegece ateatgteat
                                                                    4980
gacacaacaa agtccggggc ctctggctgc tcagaggggg ctggcgacac gccaggggct
                                                                    5040
ccagggccac attaaagcca tcctccaagc ggggcttcca cgccaagagc tcctccagcg
                                                                    5100
aagacaagta aaagctgatt ggtttggtgg tgtccttgtc ataatatcta actggcaggg
                                                                    5160
ggtccgggga aaaactgacc acctctcgaa agactgtctc ttcttcttca tctttgatgc
                                                                    5220
tectteeegg eegeeeggga geteteetge etee
                                                                    5254
```

```
<210> 6334
<211> 4775
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (231)...(3433)
<223> similar to gi3882177 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
ccgaggcagt gatgcatcag actttgacat ttcagaaatc cagtccgtgt gctcagatgt
                                                                     3300
ggaaactgtc ccccagacac acagacctac accccgagca ggttctcggc catccacagc
                                                                     3360
gaagcettca aaaateecca egeeccagag gaaateacet gecagcaaat tggacaagte
                                                                     3420
ctcaaagaga tagtgcaatt ggttctacca aggcccttcc ttgagcattt attatttaag
                                                                     3480
tttgaacgat gtaaaatatg gtgtagaaat tcttgtgaaa tattgcaaga ggcgagttta
                                                                     3540
aaattctgca gatggcctta tttgtgtatt tgtcttttta ttttatctgt ataattttt
                                                                     3600
ttgtcagata ttctggggtt aaagtcacat catatgtgag gaggaaaagt ttaacatgaa
                                                                     3660
ctaacatttc tgcactgtaa cgtgccgggc acacactaaa ctcagttact gtacctacag
                                                                     3720
gtaagtctac atcctctctg acagccacag cactacatca atccctgacg ttagggatac
                                                                     3780
ctcatgacat tttcctgttt ttatggaaac tctgagaagc tgaatgatac atgcagggga
                                                                     3840
tattttttga gatgatttaa atgtaaacca aaagatggaa gacaaaaaga caaacaccc
                                                                     3900
cacacgcagt ctttgcagta tctgacagag aactcacagg aagttacttc aagcacttgc
                                                                     3960
cagtactatg atattcaagt accttgcagc atttctctgc cattgctttc aatgaggcca
                                                                     4020
gaggcatcct ggatattaga cctattatac tgtaagaata taagtataaa gtgcgttcat
                                                                     4080
atacatgtga ggttttcttt tgcttgagtg gacagtagca cctgtatcat tgaactcatt
                                                                     4140
ttgtatcaga gcaattttgc ttgcagaaag ctatgaaata aaacacgtcc cttaactgca
                                                                     4200
ttgctatgga attaattttt tttccccagg gaaaactagt gtatttttt atgagcaata
                                                                     4260
tcaatttgga gtgaccaaaa gatacttaaa aatgggttta ttttgatttc tcatctgaaa
                                                                    4320
taatcatgtt ctggatatta gacctattat actgtaagaa tataagtata aagtgcgttc
                                                                    4380
atatacatgt gaggttttct tttgcttgag tggacagtag cacctgtatc attgaactca
                                                                    4440
ttttgtatca gagcaatttt gcttgcagaa agctatgaaa taaaacacgt cccttaactg
                                                                    4500
caaaaaaaa aaaagggggg ggcctttaaa aagaacccct ggggggccca aatttaaccc
                                                                    4560
gggagggaaa attaaaattt ttccccttat ggggggcttt ataataaccg cgtggggaat
                                                                    4620
tttggaaaga aaccttcttt tgggggggg gaaaaaaggg aacaccccc ccccaaaaat
                                                                    4680
taaggcctca agggaaaaaa aaaattttaa aggggtaaag ggggaaaaca aacccacata
                                                                    4740
ccctggctgt taaaaatcag gcaagaccga accgc
                                                                    4775
```

```
<210> 6335
<211> 1932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1685)...(1080)
<223> similar to gi5834273 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6335
ttttttttt ttccagaaaa ggatatttt tttattcaag taactgcaaa taggaaacca
                                                                       60
gagagggagc cccaggctgg gacaaatcat ggctacccct ccccaacaga acagggggag
                                                                      120
gaggtggccc ctacaccctt tatggtcgat tcgggccccc ttgctcactc tgctgcagca
                                                                      180
tectagggge agggeeceae ettecetggg aetggggtag teggteaece ageetgeeat
                                                                      240
gccccagccc ctcttcccca caaagagtat cttgggggag gggatcgtgg gcagaacagg
                                                                      300
aggcaatgag gatgaacatt tggcgctggt agcagcagca atgacggatg tcgaagaatg
                                                                      360
gaacattgaa caaaaaacaa cacaactgtc cagaggtagt ttgtgaacag aggaaaaatg
                                                                      420
gaaccagaac cttggggggc agggaggagc aggaggggg ttgggagcgg gcagggtgag
                                                                     480
ctccttgtta ttggtgcccc atctgaggag ggggaaatgg ctgagtggcg gaagcaaagt
                                                                     540
agggttaggg gagcagcccc agcccacctc aggtggcggc cacagggctc ttgggcctca
                                                                     600
cctggacaat aagtgactgc atctccatca ccacaatatg tactcagatc ccaggcggag
                                                                     660
```

```
ggcaaggggg Ctgtggccac agtgaagagg gagtagggga ctcaccctc ctgccttcct
                                                                      720
gtagccgaag ggggctgtcc aacctagtac ggggactagg gaagttgggg aaggatgaaa
                                                                      780
agtgagcccc acgtggtgac aaagacagtt tggctggggg aatcctgggg gccagcaccc
                                                                      840
                                                                      900
ccctccattg gccacacctg ctgctgccag ggcagtggag tagggcgtgc caggatgaga
tgggggtttgg gcccctttta aggccagggg aaccctccca ggccccacta tgggaagcca
                                                                      960
gagggaacag tgaaggagca gagagggcgc ccccaaacca aaagcccaga gagcaatgtc
                                                                     1020
cccaccacca agggagtggg gacgcagcag gtgcagggtg cggctaagtg ggatgttagc
                                                                     1080
cttgtccagg agggcatgtg tgtatgcgtg ggtgggcggg gggagctggg aactgaggcc
                                                                     1140
aggggaaaac tgctccccac tcagcccatg ggagccctgc agcggctggt gtgctgtgta
                                                                     1200
gtgtggtggt gagggcacag gtggaagatg ggggtggcgg ccagaggcgg tggtgatggt
                                                                     1260
gggcctgggg aaggggcggg ggcggtggga gcggagcaaa gctgtccagt cccagaagga
                                                                     1320
agetgeteet eeagtgagga geaggeggea egeatgggte aetgeteete eteegaggae
                                                                    1380
tectgegaga tgeceteete tteeteette tecagttttt tgggtetgee eettggttte
                                                                     1440
cttcctggag ttgtggtggt tttccgggtc ttggcagcac ccttgttttt gcttcccttt
                                                                     1500
ggtcggcccc gaggtctctt aggtgttggc acttcgctgg gctccttctg actccctacc
                                                                    1560
agegetgtee egggaeteae eggaggetge ttgegeggee tgeeceggee eegettetea
                                                                    1620
gtgccgtcct tttcctgctt ggaggccaag ggctggctgg acttcgagct cgactcactc
                                                                     1680
atcttccctt ctctaaggag caggtggaag agtgatggct gggatgcgcg agctcggccg
                                                                    1740
ccggcctgcg gtgcgcgctc cgggttgccg ggagcggcgg tgctgggcgc tgaggaccgg
                                                                    1800
cetggeteeg eegeggeege egetggtage aaatgeggat geettettgg ageeeggeea
                                                                     1860
gcgccagaaa tagccccggc tcggagtccc aattagagga gcgcagcacc ggctcagggg
                                                                    1920
agcttaaaaa gc
                                                                    1932
```

```
<210> 6336
<211> 2113
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (166)...(1332)
<223> similar to gill47567 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6336
cccaaaacaa cagcagatga tatcttccaa gtgtctgctc gggacacggc ttcagccctc
                                                                       60
tgtggtcccc tctccccggg gggctttggg attcttgtca agctccttca agagcctgca
                                                                      120
agcacttaac cagccaccca gagttccctc actgaagatc tgagcatgac ccgggacgag
                                                                      180
gcactgccgg actctcattc tgcacaggac ttctatgaga attatgagcc caaagagatc
                                                                      240
ctgggcaggg gcgttagcag tgtggtcagg cgatgcatcc acaagcccac gagccaggag
                                                                      300
tacgccgtga aggtcatcga cgtcaccggt ggaggcagct tcagcccgga ggaggtgcgg
                                                                      360
gagctgcgag aagccacgct gaaggaggtg gacatcctgc gcaaggtctc agggcacccc
                                                                      420
aacatcatac agctgaagga cacttatgag accaacactt tcttcttctt ggtgtttgac
                                                                      480
ctgatgaaga gaggggagct ctttgactta cctcactgag aaggtcacct tgagtgagaa
                                                                      540
ggaaaccaga aagatcatgc ggagctctgc tggaggtgat ctgcaccttg cacaaactca
                                                                      600
acatcgtgca ccgggacctg aagcccgaga acattctctt ggatgacaac atgaacatca
                                                                      660
agctcacaga ctttggcttt tcctgccagc atggagccgg gagagaggct gcgagaggtc
                                                                      720
tgcgggaccc ccagttacct ggcccctgag attatcgagt gctccatgaa tgaggaccac
                                                                      780
ccgggctacg gaaaagaggt ggacatgtgg agcactggcg tcatcatgta cacgctgctg
                                                                      840
gccggctccc cgcccttctg gcaccggaag cagatgcttg atgctgagga tgatcatgag
                                                                      900
```

```
cggcaactac cagtttggct cgcccgagtg ggatgattac tcggacaccg tgaaggacct
                                                                      960
ggtctcccga ttcctggtgg tgcaacccca gaaccgctac acagcggaag aggccttggc
                                                                     1020
acaccccttc ttccagcagt acttggtgga ggaagtgcgg cacttcagcc cccgggggaa
                                                                     1080
gttcaaggtg atcgctctga ccgtgctggc ttcagtgcgg atctactacc agtaccgccg
                                                                     1140
ggtgaagcct gtgacccggg agatcgtcat ccgagacccc tatgccctcc ggcctctgcg
                                                                     1200
ccggctcatc gacgcctacg ctttccgaat ctatggccac tgggtgaaga aggggcagca
                                                                     1260
gcagaaccgg gcagcccttt tcgagaacac acccaaggcc gtgctcctct ccctggccga
                                                                     1320
ggaggactac tgaggggctg gccagtcagg gagggctagg gggcaggtgg ggaggggaag
                                                                     1380
ccatggaaat acaagtcaaa ggggtgagat gcgtgcaggc ctctgcagaa ggagcacttg
                                                                     1440
gccctggcca ggaacccctg gaactgaggc cacgatcccc tctcaaaggc tgtgcacaag
                                                                     1500
ggaagtgggt gttcccacca cacagcaata cctgcaggct ggggcaggcc ctgggtgggc
                                                                     1560
agagatcaca cgtggcctga gaaccaggaa ccccctgctc ctctacttcc tagatgagcc
                                                                     1620
accatctcca tttctcttta ggggaggccc atagttactg acactcaggc tttcttccct
                                                                     1680
tagggtcaca gggtgaggat caaagacaca aatgtctgag atacacaatt gcaggagatt
                                                                    1740
ttattggccc catgacatcc agtgacagtg tgggagcagg ctactctcca gggacatgtt
                                                                     1800
tttggaggca tatggagaag ggggcccagg cgaggtggct cacacctgta atcccagcac
                                                                    1860
tttgggaggt cgaggtggga ggatcgcttg aggccaggag ttcgagacca ccctgggcaa
                                                                    1920
cagagcgaga tcccatcact acaaaaattc aaaaaattag ccaggcatgg tggtgcacac
                                                                     1980
ttgtagtccc agctactcag gaggctgagg tgggagaatt gcttgggccc aggaattcaa
                                                                    2040
ggctagagtg agccgtgatc accagtgcac tctagcctgg gcaacagaga aagacctgt
                                                                    2100
ctcaaaaaaa aaa
                                                                    2113
```

```
<210> 6337
<211> 7564
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(3534)
<223> similar to gi2224581 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6337
ataatgccct gcgggagctc gagactgtta aggggatgtt ggacacatcc taatgaacct
                                                                       60
gttagtgacc tctcttactt tgactgcatt gagagtgtga tggaaaactc caaggttctg
                                                                      120
ggtgaatcga tggcagggat ttcacagaat gccaagaccg gagacctccc tgcctttggg
                                                                      180
gaatgtgtgg ggattgcatc caaggetete tgtgggetga cagaggetge ageccagget
                                                                      240
gcatacttgg ttggcatctt tgatccaaac agccaggcag gccaccaggg cctggtggac
                                                                      300
cccatccagt ttgccagggc taaccaggcc atccagatgg catgccagaa cttggtggac
                                                                      360
cctggcagca gcccatcaca ggtcctgtca gccgccacaa ttgttgccaa gcacacgtca
                                                                      420
geettgtgta atgeetgeeg categeetca tecaagaegg ccaacecagt ageeaagagg
                                                                      480
cacttegtee agteggeeaa ggaagtegee aacageactg ccaacetggt gaagaceate
                                                                      540
aaggccctgg atggggattt ctctgaagac aaccgcaata agtgtcgcat cgccaccgca
                                                                      600
cccttgattg aagctgtgga gaacctgaca gcgttcgcct caaaccctga gtttgtcagc
                                                                      660
attectgeee agateagete egagggttee caggeacagg aaccaateet ggteteagee
                                                                      720
aagcccatgc tggagagttc atcgtacctc attcgcactg cacgctctct ggccatcaac
                                                                      780
cccaaagacc cacccacctg gtctgtactg gctggacatt cccatacagt gtccgactcc
                                                                      840
atcaagagtc tcatcacttc tatcagggac aaggcccctg gacagaggga gtgtgattac
                                                                      900
tccatcgatg gcatcaaccg gtgcatccgg gacatcgagc aggcctcgct ggccgccgtc
                                                                      960
```

```
agccagagcc tggccacgag ggacgacatc tctgtggagg ccctgcagga gcagctgact
                                                                     1020
tcggtggtcc aggaaatcgg acaccttatc gatcccatcg ccacagcggc tcggggagaa
                                                                     1080
gcagctcagc tgggacataa ggggacacaa ctggcaagct attttgagcc cttgatctta
                                                                     1140
gccgcagttg gtgtggcctc caagattctt gatcatcagc agcagatgac ggtgctggac
                                                                     1200
cagaccaaga ctctcgcaga gtctgccttg cagatgttgt atgcagccaa agaaggtggc
                                                                     1260
ggaaacccca aggcacaaca cacccatgac gccatcacag aggccgccca gttgatgaag
                                                                     1320
gaagccgtgg atgacatcat ggtgacgctg aacgaagctg ccagtgaagt ggggctggtt
                                                                     1380
gggggcatgg tggacgccat tgcagaagcc atgagcaagc tggatgaagg cactcctcca
                                                                     1440
gaaccaaagg gaacatttgt cgactatcag acgactgtgg ttaaatactc caaagccatt
                                                                     1500
gcggtgacag ctcaggaaat gatgactaag tcggttacta acccggagga gttgggagga
                                                                     1560
ctggcttcac aaatgaccag tgactatggg cacctggctt tccagggcca gatggcagca
                                                                     1620
gccacggcgg aaccagagga gatcggattc cagattcgca ctcgtgtgca ggacctgggc
                                                                     1680
cacggctgta tcttcctggt gcagaaggca gggggccctc caggtctgcc ccacagacag
                                                                     1740
ctacaccaag agggagctga tcgaatgcgc ccgtgccgtc acggaaaagg tctccttggt
                                                                     1800
getetegget etccaggeeg ggaacaaagg aacccaggea tgcattacag cegecacege
                                                                     1860
tgtgtctggg atcattgccg acctggacac caccattatg tttgcaacag cggggacgct
                                                                     1920
gaatgcagag aacagtgaga ccttcgcaga ccacagggag aacattctca agacggccaa
                                                                     1980
ggccttggta gaagacacga aactacttgt gtcaggaget gcgtccactc ctgacaagct
                                                                     2040
ggcccaggcg gcccagtcct cagcagccac catcacccag ctcgcagaag tggtcaagct
                                                                     2100
gggggcagcc agcctgggct ccgacgaccc cgagacccag gtggttttga tcaatgccat
                                                                     2160
caaagatgtg gccaaggccc tttctgatct catcagtgct accaagggag ctgccagcaa
                                                                     2220
gccagtggac gaccetteca tgtaccaget caaggggget gccaaggtga tggtgaccaa
                                                                     2280
tgtcacctcg ctcctcaaga ctgtaaaggc agtggaggat gaggccaccc ggggcaccag
                                                                     2340
ggcgcttgag gccacaattg aatgcataaa gcaggagctt acggtgttcc agtcaaaaga
                                                                     2400
cgtacctgaa aagacatcat cacctgaaga atccataagg atgacgaaag gcatcaccat
                                                                     2460
ggcaacagcc aaagccgtgg cagctgggaa ctcatgtaga caggaggacg tgattgctac
                                                                     2520
tgccaacctg agccggaaag ccgtgtcaga tatgttgacg gcttgcaagc aagcatcctt
                                                                     2580
ccaccccgat gtcagtgacg aggtgagaac cagagccttg cgtttcggga cggagtgcac
                                                                     2640
ccttggctac ttggacctcc tggagcacgt cttggtgatt cttcagaaac caaccccaga
                                                                     2700
actcaagcag cagctggccg ctttctccaa gcgagtcgcc ggcgctgtga cagagctcat
                                                                     2760
ccaggcggcg gaagccatga aaggaacaga gtgggtggat ccagaagacc caactgtcat
                                                                     2820
tgcagaaaca gagttactgg gggctgcagc atccatcgaa gctgctgcta agaagttaga
                                                                     2880
gcaactgaag ccaagagcaa aaccaaaaca agcggatgag accctggact ttgaggaaca
                                                                     2940
gatcttggaa gctgctaaat ccattgctgc tgccacaagc gccctggtca aatcggcctc
                                                                     3000
agcageceag agggagetgg tggeceaagg aaaggtggge tecatecetg ceaatgetge
                                                                     3060
agacgacgga cagtggtcac aggggctgat ttctgctgcc cggatggtgg cggctgcgac
                                                                     3120
cagcagtete tgtgaggegg ccaatgeete egtteaggga caegeeageg aggagaaget
                                                                     3180
catctcatct gccaagcagg tcgccgcttc cacggctcag ctgctggtgg cctgcaaggt
                                                                     3240
gaaggccgac caggattcag aggccatgag gcggctacag gcggcaggaa atgctgtgaa
                                                                     3300
aagageetea gacaatettg teegtgeage eeagaaggea geatttggea aagetgatga
                                                                     3360
cgacgatgtt gtagtgaaaa ccaagtttgt ggggggcatt gctcagatca tcgccgccca
                                                                     3420
ggaagaaatg ctaaagaaag agcgagaact ggaagaagca aggaaaaaac tggcccaaat
                                                                     3480
ccgccagcag cagtataagt ttttacccac cgagctgagg gaagatgagg gctaaaggtg
                                                                     3540
cgagcccaga tggcgagccc caggggatgg ccctggctga actggacaga cagtgttcct
                                                                     3600
gagaggetgg geacttaget ggaaacegee caeeteeete eegggtgage etggageeet
                                                                     3660
gegtgettgt teteacatet etgteeegte ggeaetgget geatgategt gatgteacae
                                                                     3720
ggtacaatgt cctacccaca actectetge egecteceet catgeeteae egtgteteag
                                                                     3780
gagagagggg tgcacgtttc atggactgtt accaacaaag aaaagtcagt attatgttgt
                                                                     3840
tctcagacac tttggctttt gttggtcctt ctcttaggcc tgctcctgga cctctttatg
                                                                     3900
atattgtgat agggaaaaaa atcattgacg tcatagaata ttcttcttcc tctcaggaga
                                                                     3960
agacggaagc tggagttgga catggttcat aaaagccaga aacacaaacc cgtgtggact
                                                                     4020
ccgggagggt gactcaggtc ctccttccat gtcttgagca ctggctcacc cagggggtga
                                                                     4080
aaaattcccg cccctgtttg cacgctttct tgcctccgtg tgtaagctcc ttgtacaacc
                                                                     4140
cagacccatc ttgtattttg tggcccagaa aactgaacga ttattttgtt cctccgtagt
                                                                     4200
ccaaagggca gagttgcgga aggccgtcgg ggcttggtga gcaggggctg taatacagtc
                                                                     4260
tgtggggctc cttaccctgc agaggctgtt tcagctcaca cagagttcat ccacacaaac
                                                                     4320
ccacggetee cagttgacag teagtggaat getegtetee ttagegteea gggtggggat
                                                                     4380
```

```
tetgetggaa taaagagett eeteagtgae teateettta ggteeeaege tggtttetgt
                                                                     4440
gccttcagaa tggtcacaag cccggattgg aaaggatctg cttacaaacc tgtcccctgt
                                                                     4500
cctccaaccc aaaacgcctt ttttttctgt cttaatatcc agaaaatcta aatgcatcct
                                                                     4560
aaaatcaatt gtgaaccctt taacaaggat agtttttact tattatcaca taagacataa
                                                                     4620
gatgttttca ttttctggat gtcacacttc cagaatttca tatttttccc ctctttctt
                                                                     4680
teceetttte agageeetee cataggaagg gaagggettg aatttaeeet taatetgeae
                                                                     4740
ctttagccaa ggcagtgcat ggaagatgaa tggctcgtgg ggccagaatc taatgccagg
                                                                     4800
gagcaggagt gtttgaaaga attcatagtg gggaaggtaa aagttaatgg aagtacatga
                                                                     4860
ttttcaaaac tggtaacagt taaaggcact cacceteege etetetete etetetet
                                                                     4920
etgggggget atcatgtett ggaeteeate cacactatag tttcaaagtt ccactgacgg
                                                                     4980
gggaaagttg gtgctttggt cctccgaaga tgtcaccttt cgaccttgcc cgatcttgtt
                                                                     5040
tcaccagact ctagcccatg tcatggtttt aaaatacata aacttctgac agcttcccat
                                                                     5100
atttataagt tacttataag tgctgcacgt attagaattt tttttttca gaccagtaaa
                                                                     5160
gttagaaaaa agacgctgta aaggaaaagc aagtgagagt atgtgtagga cactgacagt
                                                                     5220
gtgtgggcac cagttctgaa gaggaggga gctgctggag ccctagcctg ttggggaaaa
                                                                     5280
gctggcacac tcttggctcg ccctctttga gtggagctga tccaacacct catgcctgcc
                                                                     5340
ttggccggac actgagagga ggggcacacg tgcttccaga gacactcagg agtcagaccc
                                                                     5400
caatgctcag agtcacaatg tgttcatggc ctcctgtaac aggactctgg ggatcccctc
                                                                     5460
tgtggcccag cccaccccac cctctgctct tctatgctgt gcccagggca gctgcctct
                                                                     5520
tetgeetgtg ecceatecea teetgaaaac ecaggaceaa ggeaggggea ggeageeagt
                                                                     5580
tettecacet tgeeteagag teatttaaaa eetttaetge atttgatace agaaaageet
                                                                     5640
ccagagacaa accaaatgca aaggcctttc ctttataact ctaaagaaca ggcatcgaaa
                                                                     5700
gtttattttt gtaggagcta tataaatact cacctttctg gagtcgtcca gtgctgggag
                                                                     5760
ctttggggag attggttctc agttatcacc tggtatggtc ccagtttctc atctgtcctt
                                                                     5820
tecteateca ecetgeacat gtgtatgtga aeggettegt ggeeggtgtg gtggtttete
                                                                     5880
atttcataag atagttgaag ggccatgcct tgtctggatg ttatttaata ggcactactg
                                                                     5940
cggtgtcctc agatggtact gagggggcct tctggtcctt caaaggaaaa taacacaggc
                                                                     6000
atgagttcat ttgggagtgt gaactttcag aacacctaat aagagagtgg tgtcagagta
                                                                     6060
aaaacggccc caggtctgga gcatagaagt gtatctctgt gaagagagag ccggtgtgtt
                                                                     6120
gacatgtggt tetteteaca eccetetact ectegaggge tttgaateet tgggetgatt
                                                                     6180
tttgtgccag aaattgctgt tcccgatggc caaaagggga acctgaactg gatttcagaa
                                                                     6240
ctgcccagtg atttgaaaat ttagatttta cttgggcctt tcaggagtct ttagataggg
                                                                     6300
atgetgaggt catatttagt teaatgaaca geeettgttt aagttttgee agtgteeage
                                                                     6360
cagctgtggc cctggccatc tgtgcaggca ggttcctcaa ttcctggttg gccctgcagt
                                                                     6420
cggtcaacac agtccctcca ggtcggctgc agaggcagct gcccagcctg cagtctatgc
                                                                     6480
acgggcctta agaaatgagc tgcctgtagc ctcacggcat atgcttttat cagggaaaac
                                                                     6540
ccttcgagct tcttctgatt ctcacctgct tgctttctgg ctgtcttagt cagtgtgttt
                                                                     6600
acaggcaact aaagcctgtt cctaatttat caaaaaatta taaccaaaat tcaccatagc
                                                                     6660
ctaagagagt aaaccccacc tccaaagtga tgccaaggcc aaaacctcat caaggaacca
                                                                     6720
gacacaggtc aaaagtggtg agcaagccat ggtctctgct cctggggaac tcacacgctg
                                                                     6780
accecegagg ageettggtt teeteeetgg cagatagtee ecagaatett eteteecage
                                                                     6840
tttgaggttc tgggctctgg aaaggcctct gggatgctgg ccttaagatc tcagcacaga
                                                                     6900
ctatcagcat gttccattct cagattcctg gaggaaaggt accctctgtt gaccaagggg
                                                                     6960
ctggctgctt ctgagactta ccaacccaag aaatttggag acattcccct caggctaaaa
                                                                     7020
ggcagcggtc cccagagttc agaaagcaaa agatcttgac aactgtgcca gtagtggctc
                                                                     7080
tggtcctatc tctccacagt gctggcctct gctggggaag gcatctttcc caaaggtatc
                                                                     7140
cccaagtacc atgttgaaaa tgtcctcagt ctgttgctcc atctttctga gcctctgctt
                                                                     7200
ggtatgtcat gtttatggtc actacggatg agtgtgtgca gagtttgggt tgattctttt
                                                                     7260
aaatgctaca aacaagagct atttcttttc aataaaaaag gtttggattc ggcctcttcc
                                                                     7320
tctgagccca cctcccagcc ctccagggag catcagtgta cctgagtcac tttgtctgca
                                                                     7380
tctcttcatc ccacaaaaca cgaggctggg tctcattcag cggcctctca ccaaccttca
                                                                     7440
agatccagaa gaaaacagga acgttcagct ctgccctgtg tcgtatctaa tcacatacat
                                                                     7500
taatttatct aaccacataa gttattttt tttatttgcc cagaaataaa cctttaaagg
                                                                     7560
aacg
                                                                     7564
```

```
<210> 6338
<211> 4407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (447)...(2959)
<223> similar to gi4886427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6338 tttcgtttct cgcgcggatg gtgaagctga atttggttcg ctttaccctc ggacaggaga 60 gcacggctgg gcacgggggg actcaccgcc agtgagagta gggacgaagg ctcagggaag 120 gcgagcttcg gtccaagccg ttggggtgtg gggaggggaa tccatttcgt agacagctct 180 gccgaggcac ggagagggc ggtgctgctt ggggtcaact gggatttagg gcttggattc 240 atttaagaac ctgagcttcc ttcaccaaac ctagacagca agagagagac aagcccgagg 300 cctgacttct agcactcctg agtttgagcc ctatgagcag tggaacctag ggaccaccaa 360 ggatccagat ataattcttt cctcagtaat agaaaaaaga atctgggatc taagaagata 420 cctactcatt ttctaagtga ctggccatgt cattgtccca cttataccgg gatggggaag 480 gccgcattga tgatgatgat gacgagcggg agaactttga gatcactgac tgggatctcc 540 agaatgagtt caaccccaac cgacagcgcc actggcagac caaggaagaa gccacctacg 600 gggtgtgggc agagcgagac tcggatgatg agaggcccag ctttggaggc aaacgggccc 660 gtgactactc tgcgccagtc aacttcatca gcgcagggct caagaaaggg gcagcggagg 720 aggcagagtt ggaagattct gatgacgaag agaaacctgt taagcaggac gactttccta 780 aggattttgg accaaggaag ctaaaaacgg gtggcaattt taagcccagc cagaaaggtt 840 ttgcaggagg aaccaaatct ttcatggact tcggcagctg ggaaagacac acaaaaggaa 900 ttggacagaa gcttcttcag aagatgggct acgtccctgg acggggcctc gggaagaatg 960 cacaaggtat cattaaccca attgaagcca agcagagaaa gggaaaaggt gctgtggggg 1020 cttatggatc cgagcgcacc actcagtcca tgcaagactt ccctgtggtt gactcagagg 1080 aagaagctga agaggagttt cagaaggagc tgagccagtg gaggaaagac ccaagtggaa 1140 gcaagaagaa gcccaaatac tcttacaaga ccgtggaaga gttgaaggcc aagggcagga 1200 ttagcaagaa gctcactgct ccccagaagg aactttctca agtcaaggtc atagacatga 1260 caggccggga gcagaaggtc tactacagct acagtcagat cagccacaag cacaacgttc 1320 ccgatgatgg gctgccgcta cagtcccaac agctgccaca gtctggcaaa gaggccaagg 1380 cccccggctt cgcgctgccc gagctggagc acaacctgca gctgctcatc gacctcacgg 1440 agcaggagat catccagaat gaccggcagc tacagtatga gcgggacatg gtggtcaacc 1500 tettecatga getggagaag atgacegagg teetggacea egaggagegg gteatetega 1560 acctcagcaa ggtcctggag atggtggagg agtgcgagcg gcggatgcag cccgactgca 1620 gcaaccccct caccctggac gagtgtgccc gcatcttcga aaccctgcag gacaagtact 1680 atgaggagta caggatgtcc gaccgtgtgg accttgctgt ggccatcgtc tatccactca 1740 tgaaggagta cttcaaggag tgggatcccc tcaaagactg cacttatggc accgagatca 1800 tetetaagtg gaaaageete etagagaatg accagetett gteecatgge ggacaggace 1860 tctcagcaga tgcctttcac aggttgatat gggaagtctg gatgcctttt gttcgaaata 1920 ttgtcaccca gtggcagcca aggaactgtg acccgatggt ggactttttg gatagttggg 1980 tgcacattat tcctgtgtgg atcttagata acatactgga ccaactcatc ttccccaagc 2040 tgcaaaagga ggtggaaaac tggaacccgc tcacagacac tgttcccatc cactcttgga 2100 tccacccatg gctgcccctt atgcaggcac ggctggagcc actctattcc cccatccgta 2160 gtaagetgte cagegeeetg cagaagtgge accecagega etectetgee aageteatee 2220 tccagccctg gaaggatgtc ttcactcctg gctcctggga agcattcatg gtcaaaaaca 2280 tagtgcccaa gctggggatg tgtcttggtg agctagtcat taacccccac cagcagcaca 2340 tggatgcatt ctattgggtg attgactggg aagggatgat ctctgtctct agcctggtgg 2400

```
gacttettga aaageactte tteeceaagt ggetteaggt getgtgetet tggeteagta
                                                                     2460
acageceaaa ttatgaggag ateaecaagt ggtaeetggg ttggaagteg atgtteteag
                                                                     2520
accaagtgct ggcacatcca tctgtcaagg acaaatttaa tgaggcactt gatatcatga
                                                                     2580
accgggcggt gtcctccaac gttggtgcct acatgcagcc caggagcacg ggagaacatt
                                                                     2640
gcctatctca cccacacgga gcggaggaag gacttccagt acgaggccat gcaggagagg
                                                                     2700
egggaggetg agaacatgge teaaagggge attggegtgg eegetagete tgtgeecatg
                                                                     2760
aactttaagg acctcattga gaccaagget gaggagcaca acattgtett catgecegte
                                                                     2820
attgggaage gacacgaagg gaagcagete tacacetttg geegeattgt gatetacate
                                                                     2880
gaccggggag tggtctttgt ccagggcgag aagacgtggg tgcccacctc actgcagagc
                                                                     2940
ctgatcgaca tggccaagtg aactgtggca ggtccagaac cagtcagaga cttgccccta
                                                                     3000
agagggatgt actgtaaata aacagtattt ttagatcacc ttcaaaaggg taacttcttt
                                                                     3060
actcaggagc tactccacat caggccaggt catgagggaa ggatgtaaaa cqqqacaatq
                                                                     3120
ccacggtagg gcaggaatct ttataccaag tcctcatgtg gggtatcgtc ctcaaaacag
                                                                     3180
gacagccaag ttgatgttct ttcctggcaa aggagttctc tggtagttcc tccatagcag
                                                                     3240
cettecettt agtetetggt ggcagettet aceteageca acaetgagta ceteacaacg
                                                                     3300
agttcagtca gtagcagaag gatcttctct cttgttcctg atgatttcaa ggtcctcaca
                                                                     3360
gtcctgataa tctggttctt cccgaaactc cccaaatatc ctatggagag ctggttctag
                                                                     3420
cttttgcaca gggaaccagt ggacagaggt atcattaaat atqtccatqt attqtqaaqt
                                                                     3480
ctgaggaaac tcaagctcct ccagtccttt taaaatctga gcagaaaaat tcaagtataa
                                                                     3540
aaacttcaga tagtcacagt aatccccact cttttgggat aaatttccac tttacttgtc
                                                                     3600
atccccactt tactttttaa aaaaataaca aatagggtat tttgatttaa atgcttttgc
                                                                     3660
ccaatgaatt ggggcgcccc aaggacagtg gatatcatgg actgtgatac taagaataaa
                                                                     3720
ggaaataagg aaaaaactta gagatgcatt taagagtcat agctttctgg aacacagacc
                                                                     3780
catggagaga gctgacagta cacttgcgcc acttaggcca tgagtttcct cctacggctg
                                                                     3840
taaagaaaga tagaattett eteagtttea caecetttte cateceagee cetttattea
                                                                     3900
gatagatacc tttgcaatgt agggataatt tttctgcaga atccttgcca acaacctaga
                                                                    3960
aattaaaaaa aaccaaaaaa acaaaaaaaa aaaccatgat taggaggtat gaggatagtt
                                                                     4020
tcattcaact tttaaaacac ataaaagggc aagatgattg aagcatagta agaattcagg
                                                                     4080
aaaaaactca agatgtggag taaaccagtt aaatagttga aaatgtgggc caggcgcagg
                                                                    4140
taatcccagc acttcaggag actgaggcgg gcggatcatt tgaggtcagg agttcaagac
                                                                     4200
cagcatggcc aacatggtaa aaccccatct ctactaaaaa tacaaaaatc agccgggcgt
                                                                     4260
cctggtgtgc atctgtaatc ccagctactc attaggctga ggtaggagta tcgcttgaac
                                                                    4320
ccaggagaca gaggttgcag tgagctgaga ccataccact gcactccagc cggggggaca
                                                                    4380
gagtgagact ccatctcaaa aaaaaaa
                                                                    4407
```

```
<210> 6339
<211> 1960
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (240)...(1778)
<223> similar to gi3387977 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6339
aattcccggg tcgagggagt ccagctctgc agctggaggt gctcatctgc ctggggctca tgggtttgga acgggcactc aatgtgttgg cgcctatatt ctataggaac attgtgaact tgctgactga aaatgcacct tggaactctc tggcctggac tgttaccagt tacgtcttcc 180
```

```
teaagtteet ceaggggggt ggeactggea gtacaggett cgtgagcaac ctgcgcacct
                                                                      240
teetgtggat eegggtgeag eagtteaegt eteggegggt ggagetgete atetteteee
                                                                      300
acctgcacga gctctcactg cgctggcacc tggggcgccg cacaggggag gtgctqcqqa
                                                                      360
tegeggateg gggeacatee agtgteacag ggetgeteag etacetggtg tteaatgtea
                                                                      420
tececaeget ggeegacate ateattggea teatetaett eageatgtte tteaaegeet
                                                                      480
ggtttggcct cattgtgttc ctgtgcatga gtctttacct caccctgacc attgtggtca
                                                                      540
ctgagtggag aaccaagttt cgtcgtgcta tgaacacaca ggagaacgct acccggqcac
                                                                      600
gagcagtgga ctctctgcta aacttcgaga cggtgaagta ttacaacqcc qaqaqttacq
                                                                      660
aagtggaacg ctatcgagag gccatcatca aatatcaggg tttggagtgg aagtcgagcg
                                                                      720
cttcactggt tttactaaat cagacccaga acctggtgat tgggctcggg ctcctcgccg
                                                                      780
gctccctgct ttgcgcatac tttgtcactg agcagaagct acaggttggg gactatgtgc
                                                                      840
tetttggcac ctacattate cagetgtaca tgeceetcaa ttggtttgge acctactaca
                                                                      900
ggatgatcca gaccaacttc attgacatgg agaacatgtt tgacttgctg aaaaagggag
                                                                      960
acagaagtga aggaccttcc tggagcaggg cccttccgct ttcagaaggg ccgtattgag
                                                                     1020
tttgagaacg tgcacttcag ctatgccgat gggcgggaga ctctgcagga cgtgtctttc
                                                                     1080
actgtgatgc ctggacagac acttgccctg gtgggcccat ctggggcagg gaagagcaca
                                                                     1140
attttgcgcc tgctgtttcg cttctacgac atcagctctg gctgcatccg aatagatggg
                                                                     1200
caggacattt cacaggtgac ccaggccctc tttcggttct cacattqqqa qttqtqccc
                                                                     1260
aaagacactg teetetttaa tgacaceate geegacaata teegttaegg eegtgteaca
                                                                     1320
gctgggaatg atgaggtgga ggctgctgct caggctgcag gcatccatga tgccattatq
                                                                     1380
gctttccctg aagggtacag gacacaggtg ggcgagcggg gactgaagct gagcggcggg
                                                                     1440
gagaagcagc gcgtcgccat tgcccgcacc atcctcaagg ctccgggcat cattctgctg
                                                                     1500
gatgaggcaa cgtcagcgct ggatacatct aatgagaggg ccatccaggc ttctctggcc
                                                                     1560
aaagtctgtg ccaaccgcac caccatcgta gtggcacaca ggctctcaac tgtggtcaat
                                                                     1620
gctgaccaga tcctcgtcat caaggatggc tgcatcgtgg agaggggacg acacgaggct
                                                                     1680
ctgttgtccc gaggtggggt gtatgctgac atgtggcagc tgcagcaggg acaggaagaa
                                                                     1740
acctctgaag acactaagcc tcagaccatg gaacggtgac aaaagtttgg ccacttccct
                                                                     1800
ctcaaagact aacccagaag ggaataagat gtgtctcctt tccctggctt atttcatcct
                                                                     1860
ggtcttgggg tatggtgcta gctatggtaa gggaaaggga cctttccgaa aaacatcttt
                                                                     1920
tggggaaata aaaatgtgga ctgtgcgaag aaaaaaaaa
                                                                     1960
```

```
<210> 6340
<211> 2080
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2073)...(1281)
<223> similar to gi4678526 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6340

tttttatgc ttggaatcga atttcatgaa tttattctaa cacataaatc aggtaagaga 60
gaagtagatg gatagattt tttttttta aagaaattag cctccctggg gtacttacag 120
tagattgagg tattgaggaa tttacaaaga tataattctt tggaagatta cagaagatgg 180
aaacaccacc cccaccttc actttcaggt actggagttc attaattctt tcaccaaaag 240
cacatcactg aaggaaaatc agaagtggtt ttttagttat tattaaagta gttcaagacc 300
cagggaaccc cttgagatga aaacaaaaca gtattcaact tttcttcaca agactacctt 360
gtactggcaa gacttagagg acttctggct tgaaaaatat tgcttagaaa acttaaaaaa 420
```

```
aaatcaacaa caactatatt ttggacaaaa caatttttt ttaatctgtc ttgtaaaatc
                                                                   480
cttacttcct tttgagtctc tgatggccac aacatttcat ttgagatgtt tggcagtcac
                                                                   540
agcttcaggg gttatggtta ctgattatct aaacccctta ggtcagaatg aacaaacaca
                                                                   600
gttcatgtaa acctggctgt tattggagtc ctctgaccaa gagataatag tgaagagtgt
                                                                   660
ggagagcctg aatgcccatg gtggaaatgc tggaaaaatt aaaqqtaaqa aataaaacat
                                                                   720
agcacaggag attcagaggg ctgggatgac ttctgagctg ctctctatac ccaaqqccct
                                                                   780
ttcaatttct agctgtgaaa gatttttcat gcactgtggt gcctgatgtt tcctgcaatt
                                                                   840
tgacaaaaat aaatacttta cacaagaaaa ggatgcaagg cttctacgtt acactttqqq
                                                                   900
960
ctggaaggtg ctgattagga ctgggaatgg cctcctctgg tcgagactct ctgaccccta
                                                                  1020
agtaaatgaa cttgttccca tcccagtctc caaacagatc ccaacactac gtttgttttt
                                                                  1080
ctatatectg attgtcacac ctggaagact ctccttagta tacatgaggc ttactgccat
                                                                  1140
gagaccaaat gactagagag catcttttaa gagaagcttg ctcattcagg aaaaattaag
                                                                  1200
gatttggtac aaactgcagg ccaaagggaa gctgacatat tgttttggtg tgtattcttg
                                                                  1260
aaaacgcatc attaaatcta cagtcccttg tcagcatgct gacttttacg ctgcctcaag
                                                                  1320
gagtetteca ceacetetgt gteagetggg cagggttget cagagatgee ttetteagee
                                                                  1380
tectcagget ctacttecte eegggteaca eegteetete etgggggeee etgateattg
                                                                  1440
geeteactte teteeteate cacaccagea geeaagttgt ceteeteete ttetteetet
                                                                  1500
gcttcatcct catcgccaag atcttcttc tcttcttcat catctacaag gctgtctttg
                                                                  1560
ttttcttctt catttgaatc atcttttcc tcctccgcat cctgcaactg ttcagctcta
                                                                  1620
tgagcctcct ctgatctccg attctgctca gaacgctcag ataaatgcct tggaagtggc
                                                                  1680
acatagaaac attctgatat taccaccaag accagaccca taaaaaggcc aaaaaccaag
                                                                  1740
gtggctatga cgaaaaagac ataagaacac caagcaggaa ttccaagagt cactgtgaaa
                                                                  1800
taagttgtga aggatgccat atcttgccag agatgctaaa aagaccagcc attccagaca
                                                                  1860
tegttagaga ageeggggat ttecageeag teagaggete egactgattg ceatttette
                                                                  1920
tctaagatat aattctgcag gtcttcgaag attcctgggg ccacgataac ggcggaatat
                                                                  1980
cccatccttt gcatgaaaaa atgctgggag agtggtgaca aagaagcggc cactcaaacc
                                                                  2040
tggttcttga atgacatcta ccttccccac acctcgtgcc
                                                                  2080
```

```
<210> 6341
<211> 597
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (22)...(219)
<223> similar to gi4261801 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6341
tatgccatcg tgtgggtgaa tggggtcgac gcgctagagc atgagggatc tacctcccct
                                                                       60
ttgacaccga catcagtagc ctgttccagg tggggcccct gccctcccgc ctccgcatca
                                                                     120
ctatcaccat cggcaacatg ctcatctcct ccaccctgcc accagggage atcctcgaca
                                                                     180
tggccgacac ctccacgtgg gtaccatcct gcttccaccg cagacaccca ccttcctgtc
                                                                     240
ccaccccgtg gggcattaca ttagggtaat tacattagtg tcaagatatg ccataatact
                                                                     300
gagaatggag gagtctgagg ccctggtcca tcaactgaca gcatgaactt cacgtcaaga
                                                                     360
agtgagattg gtgaataagt gaagacagaa ggaaaattgg agatacagct ggatgtatga
                                                                     420
accetgetet aaaaacacte tttaacggta taaggattet tattaacgaa ttttattet
                                                                     480
tttttatctg atcattattt tattttgatt tatagaggaa tatatagagg gggatatcta
                                                                     540
```

```
<210> 6342
<211> 6355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (120)...(5182)
<223> similar to gi463430 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6342 ctcactgtcc ctctccggct ctagctctct ccatataaac cctcaagatt atgtcaattg 60 gttagagcca gccgggaatt tcgtgcgggt gctgaaggag ctgcgggagc cggagaagaa 120 tgaaactgcg tggagtcagc ctggctgccg gcttgttctt actggccctg agtctttggg 180 ggcagcctgc agaggctgcg gcttgctatg ggtgttctcc aggatcaaag tgtgactgca 240 gtggcataaa aggggaaaag ggagagagag ggtttccagg tttggaagga cacccaggat 300 tgcctggatt tccaggtcca gaagggcctc cggggcctcg gggacaaaag ggtgatgatg 360 gaattccagg gccaccagga ccaaaaggaa tcagaggtcc tcctggactt cctggatttc 420 cagggacacc aggtcttcct ggaatgccag gccacgatgg ggccccagga cctcaaggta 480 ttcccggatg caatggaacc aagggagaac gtggatttcc aggcagtccc ggttttcctg 540 gtttacaggg tcctccagga ccccctggga tcccaggtat gaagggtgaa ccaggtagta 600 taattatgtc atcactgcca ggaccaaagg gtaatccagg atatccaggt cctcctggaa 660 tacaaggeet acetggteec actggtatac cagggeeaat tggteececa ggaccaccag 720 gtttgatggg ccctcctggt ccaccaggac ttccaggacc taaggggaat atgggcttaa 780 atttccaggg acccaaaggt gaaaaaggtg agcaaggtct tcagggccca cctgggccac 840 ctgggcagat cagtgaacag aaaagaccaa ttgatgtaga gtttcagaaa ggagatcagg 900 gactteetgg tgacegaggg ceteetggae etceagggat acgtggteet ceaggteece 960 caggtggtga gaaaggtgag aagggtgagc aaggagagcc aggcaaaaga ggtaaaccag 1020 gcaaagatgg agaaaatggc caaccaggaa ttcctggttt gcctggtgat cctggttacc 1080 ctggtgaacc cggaagggat ggtgaaaagg gccaaaaagg tgacactggc ccacctggac 1140 ctcctggact tgtaattcct agacctggga ctggtataac tataggagaa aaaggaaaca 1200 ttgggttgcc tgggttgcct ggagaaaaag gagagcgagg atttcctgga atacagggtc 1260 cacctggcct tectggacet ecaggggetg cagttatggg tectectggc ectectggat 1320 ttcctggaga aaggggtcag aaaggtgatg aaggaccacc tggaatttcc attcctggac 1380 ctcctggact tgacggacag cctggggctc ctgggcttcc agggcctcct ggccctgctg 1440 gccctcacat tcctcctagt gatgagatat gtgaaccagg ccctccaggc cccccaggat 1500 ctccaggtga taaaggactc caaggagaac aaggagtgaa aggtgacaaa ggtgacactt 1560 getteaactg cattggaact ggtattteag ggcetecagg teaacetggt ttgecaggte 1620 teccaggice tecaggatet etiggittee etiggacagaa aggggaaaaa ggacaagetg 1680 gtgcaactgg tcccaaagga ttaccaggca ttccaggagc tccaggtgct ccaggctttc 1740 ctggatctaa aggtgaacct ggtgatatcc tcacttttcc aggaatgaag ggtgacaaag 1800 gagagttggg ttcccctgga gctccagggc ttcctggttt acctggcact cctggacagg 1860 atggattgcc agggcttcct ggcccgaaag gagagcctgg tggaattact tttaagggtg 1920 aaagaggtcc ccctgggaac ccaggtttac caggcctccc agggaatata gggcctatgg 1980 gtccccctgg tttcggccct ccagggccca gtaggtgaaa aaggcataca aggtgtggca 2040 ggaaatccag gccagccagg aataccaggt cctaaagggg atccaggtca gactataacc 2100 cagccgggga agcctggctt gcctggtaac ccaggcagag atggtgatgt aggtcttcca 2160

```
ggtgaccctg gacttccagg gcaaccaggc ttgccaggga tacctggtag caaaggagaa
                                                                     2220
 ccaggtatcc ctggaattgg gcttcctgga ccacctggtc ccaaaggctt tcctggaatt
                                                                     2280
 ccaggacctc caggagcacc tgggacacct ggaagaattg gtctagaagg ccctcctggg
                                                                     2340
 ccaccegget ttccaggace aaagggttga accaggattt gcattacetg ggccacetgg
                                                                     2400
gccaccagga cttccaggtt tcaaaggagc acttggtcca aaaggtgatc gtggtttccc
                                                                     2460
aggaceteeg ggteeteeag gacgeaetgg ettagatggg eteeetggae caaaaggtga
                                                                     2520
tgttggacca aatggacaac ctggaccaat gggacctcct gggctgccag gaataggtgt
                                                                     2580
tcagggacca ccaggaccac cagggattcc tgggccaata ggtcaacctg gtttacatgg
                                                                     2640
aataccagga gagaaggggg atccaggacc tcctggactt gatgttccag gacccccagg
                                                                     2700
tgaaagaggc agtccaggga tccccggagc acctggtcct ataggacctc caggatcacc
                                                                     2760
agggetteea ggaaaageag gtgeetetgg attteeaggt accaaaggtg aaatgggtat
                                                                     2820
gatgggacct ccaggcccac caggaccttt gggaattcct ggcaggagtg gtgtacctgg
                                                                     2880
tcttaaaggt gatgatggct tgcagggtca gccaggactt cctggcccta caggagaaaa
                                                                     2940
aggtagtaaa ggagagcctg gccttccagg ccctcctgga ccaatggatc caaatcttct
                                                                     3000
gggctcaaaa ggagagaagg gggaacctgg cttaccaggt atacctggag tttcagggcc
                                                                     3060
aaaaggttat cagggtttgc ctggagaccc agggcaacct ggactgagtg gacaacctgg
                                                                     3120
attaccagga ccaccaggtc ccaaaggtaa ccctggtctc cctggacagc caggtcttat
                                                                     3180
aggaceteet ggaettaaag gaaceategg tgatatgggt tttecaggge etcagggtgt
                                                                     3240
ggaagggcct cctggacctt ctggagttcc tggacaacct ggctccccag gattacctgg
                                                                     3300
acagaaaggc gacaaaggtg atcctggtat ttcaagcatt ggtcttccag gtcttcctgg
                                                                     3360
tccaaagggt gagcctggtc tgcctggata cccagggaac cctggtatca aaggttctgt
                                                                     3420
gggagatect ggtttgeeeg gattaceagg aaceeetgga geaaaaggae aaceaggeet
                                                                     3480
tectggatte ecaggaacee caggecetee tggaccaaaa ggtattagtg geeeteetgg
                                                                     3540
gaaccccggc cttccaggag aacctggtcc tgtaggtggt ggaggtcatc ctgggcaacc
                                                                     3600
agggcctcca ggcgaaaaag gcaaacccgg tcaagatggt attcctggac cagctggaca
                                                                     3660
gaagggtgaa ccaggtcaac caggctttgg aaacccagga ccccctggac ttccaggact
                                                                     3720
ttctggccaa aagggtgatg gaggattacc tgggattcca ggaaatcctg gccttccagg
                                                                     3780
tecaaaggge gaaccagget tteacggttt ceetggtgtg cagggteece caggeette
                                                                     3840
tggttctccg ggtccagctc tggaaggacc taaaggcaac cctgggcccc aaggtcctcc
                                                                     3900
tgggagacca ggtctaccag gtccagaagg tcctccaggt ctccctggaa atggaggtat
                                                                     3960
taaaggagag aagggaaatc caggccaacc tgggctacct ggcttgcctg gtttgaaagg
                                                                     4020
agatcaagga ccaccaggac tccagggtaa tcctggccgg ccgggtctca atggaatgaa
                                                                     4080
aggagatect ggtetecetg gtgttecagg atteccagge atgaaaggae ccagtggagt
                                                                     4140
acctggatca gctggccctg agggggaacc gggacttatt ggtcctccag gccctcctgg
                                                                     4200
attacctggt ccttcaggac agagtatcat aattaaagga gatgctggtc ctccaggaat
                                                                     4260
ccctggccag cctgggctaa agggtctacc aggaccccaa ggacctcaag gcttaccagg
                                                                     4320
tccaactggc cctccaggag atcctggacg caatggactc cctggctttg atggtgcagg
                                                                     4380
agggcgcaaa ggagacccag gtctgccagg acagccaggt acccgtggtt tggatggtcc
                                                                     4440
ccctggtcca gatggattgc aaggtccccc aggtccccct ggaacctcct ctgttgcaca
                                                                     4500
tggatttett attacaegee acagecagae aacggatgea ceacaatgee cacagggaae
                                                                     4560
acttcaggtc tatgaaggct tttctctcct gtatgtacaa ggaaataaaa gagcccacgg
                                                                     4620
tcaagacttg gggacggctg gcagctgcct tcgtcgcttt agtaccatgc ctttcatgtt
                                                                     4680
ctgcaacatc aataatgttt gcaactttgc ttcaagaaat gactattctt actggctctc
                                                                     4740
taccccagag ccccatgcca atgagcatgc aacccctaaa gggccagagc atccagccat
                                                                     4800
tcattagtcg atgtgcagta tgtgaagctc cagctgtggt gatcgcagtt cacagtcaga
                                                                     4860
cgatccagat tccccattgt cctcagggat gggattctct gtggattggt tattccttca
                                                                     4920
tgatgcatac aagtgcaggg gcagaaggct caggtcaagc cctagcctcc cctggttcct
                                                                     4980
gcttggaaga gtttcgttca gctcccttca tcgaatgtca tgggaggggt acctgtaact
                                                                     5040
actatgccaa ctcctacagc ttttggctgg caactgtaga tgtgtcagac atgttcagta
                                                                     5100
aacctcagtc agaaacgctg aaagcaggag acttgaggac acgaattagc cgatgtcaag
                                                                     5160
tgtgcatgaa gaggacataa cattttgaag aattcctttt gtgttttaaa atgtgatata
                                                                     5220
tatatatata aaattcctag gatgcagtgt ctcattgtcc ccaactttac tactgctgcc
                                                                     5280
gtcaatggtg ctactatata tgatcaagat aacatgctga ctagtaacca tgaagattca
                                                                     5340
gatgtacctc agcaatgcgc cagagcaaag tctctattat ttttctacta aagaaataag
                                                                     5400
gaagtgaatt tactttttgg gtccagaatg actttctcca agaattataa gatgaaaatt
                                                                     5460
atatattttg cccagttact aaaatggtac attaaaaatt caattaagag aagagtcaca
                                                                     5520
ttgagtaaaa taaaagactg cagtttgtgg gaagaattat ttttcacggt gctactaatc
                                                                     5580
```

```
ctgctgtatc ccgggttttt aatataaagg tgttaagctt attttgcttt qtaagtaaag
                                                                    5640
aatgtgtata ttgtgaacag ccttttagct caaaatgttg agtcatttac atatgacata
                                                                    5700
gcatgaatca ctctttacag aaaatgtagg aaaccctaga atacagacag caatatttta
                                                                    5760
tattcatgtt tatcaaagtg agaggactta tattcctaca tcaagttact actgagagta
                                                                    5820
aatttatttt gagttttatc ccgtaagttc tgttttgatt ttttttaaaa aacaaaccct
                                                                    5880
tttagtcact ttaatcagaa ttttaaatgt tcatgttaca taccaaatta taatatctaa
                                                                    5940
tggagcaatt tgtcttttgc tatattctcc aagattatct cttaagacca tatgcccct
                                                                    6000
gttttaatgt ttcttacatc ttgtttttac tcatttctga ctggacaaag ttcttccaaa
                                                                    6060
caattetgag aaacaaaaac acacacgcag aattaacaat tetttteeet gtgettetta
                                                                    6120
tgtaagaatc ctcctgtggc ctctgcttgt acagaactgg gaaacaacga cttggttagt
                                                                    6180
ctcttttaag ttacgaaaaa gccaattgat gtttcttatt ctttttaaat tttaaatatt
                                                                    6240
ttgttataaa tactcacagg ataccttatt tccctagcta tcatctcctt gacttaatgt
                                                                    6300
tttttaaacc caccgaatat aaatttaatt aaagatatat gttgtaaaaa aaaaa
                                                                    6355
```

```
<210> 6343
<211> 1465
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1466)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (928)...(298)
<221> misc_feature
<222> (928)...(298)
<223> similar to gi5712754 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6343 ttttttttt tcttgcatga aatatatttg gagacaatat aataaaagta atttttaaag 60 acctataaag aatgaatttt ctattggact attctaatac tatctagcag tttaaatggt 120 ttttaaagaa gtagactgga ctataacata cttctacaat tctagctata atatattttg 180 agagatactt tctacaaaac aaaacgact aaagggcaga aaaatgattc cacactaagg 240 aaggcattgg tgcctctaag aagttggccc aatctaaatt tgcacaagga ttttttcaat 300 tttcaaagca ttttccttgt ttaagtcggt caatgtagta gcataggctt cacagccgtt 360 eccagettea ecceeaagtg etteageaac aegteacteg tgagtaggag eagageette 420 ccgtcaattt catggcttct gaagaggtcg acaagagggc ataatgcaag aggatctgtt 480 tgttttagaa ataggaccac tgcttccacc gaccaggttg aagggtgctt agtgatgctt 540 ccttcctcta tgtaaccgtc attttcaact ggtgaccttg taactgaagg tggtgctgca 600 gaagcatggt cagttgagta agtgttgtgg atgctgtcag cccgagggtt gccaaggcag 660 agccctgaag aagaaccata cgttgcacca tcagatgcat aatacggctg acaattatgc 720 tcagagaaat ctgagggatg cactggactc ggagtgcggc tgaggatcgg gtcctcctcc 780 ageteagete getggtatte ttecatgeaa aaggatggee ttggaaggtt geteggggaa 840 ttattctcac gccttgacac tggtaaagtg gggctgtaac tttcagggta ggagaatgtc 900 tcgtaaacct cattttctt cattttctgg agtttaagct ttttaacaag ccggtaagaa 960 tgctttttat atccatatcg cttatgattt gtccacaggg atctcgcatg gaaacgttgg 1020 atttttgaaa cctttctacg aatcacatca atcttcttat ccaggttttg cagagcatca 1080 tatataacct ggcaatgaat aaggacatca tcaactgtct tcagttgctc ttcagtatta 1140

```
caggatgcgt cagatacaat atteggttee tattttagtg acagageetg teacgeegge 1200 cteeggaggt egeggtaaaa etgetegeag tagteetgee teteegatgg gegacagetg 1260 tgacegttag gecactegae getteggaaa ggteetggea eeggaaaceg ggeetggtea 1320 egegeaegeg agaceagtga tgeeetgaee eetgagtgga teagagaget eeeggaaege 1380 egaatteeea eactegegee eacgegteeg eggaegegtg ggtegteea gggttteagt 1440 eggtaeegae ggnateagtg ggaag
```

```
<210> 6344
<211> 2793
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (227)...(1739)
<223> similar to gi2906006 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6344 ctctgactca gtatgtcaca tttaacaaga ggccagagct tgtccaaaat ggctgtccaa 60 aaacgacccc acacttgcgt tagaagatga tacctttttc agggacagtt ttctctcttg 120 gctcctgtcc cgctggccct ctgtctgcct gtgtccctga ccatggctcc ctgcagtacc 180 ctttaacgat ttatcagcaa gactgttgaa cgcataactg cccaagatgc ctgtcctcc 240 ccctccagca cccccgccgc ccccgacgtt tgcactggcc aatacagaga agcctacctt 300 gaataagaca gagcaggctg ggagaaatgc tctcctttct gatatcagca aagggaagaa 360 actaaagaag acggtcacca atgacagaag tgcaccaata ctggacaaac ctaaaggagc 420 tggtgctgga ggcggtggtg gtggctttgg tggaggcggc ggatttggcg gaggaggtgg 480 tggcggaggc ggtggaagtt ttggaggggg cggacctcca ggtctgggag gattgttcca 540 ggctggaatg ccgaagctga gatccacggc caacagggat aatgattctg gaggaagccg 600 accaccattg ttgccaccgg gaggaagatc cacatctgcg aaaccctttt cacccccaag 660 tggcccaggg aggtttcctg tgccttctcc aggccacaga agtggtcccc cagagcctca 720 gaggaaccga atgccgccc caaggcccga cgtgggctca aagcctgata gcattcctcc 780 tccagtacct agtactccaa gacccattca atcaagtctg cacaaccggg ggtccccacc 840 agtgcccgga ggccccaggc agcccagccc cgggcccact cctcccctt tccctggaaa 900 ccgcggcact gctttgggag gaggctcaat acgtcagtcc cccttgagct cctcctcgcc 960 cttctccaac cggcctcccc tgccgcctac ccccagcagg gccttggatg acaaaccccc 1020 tecaccacet cetecagtgg geaacaggee etecatecae agggaagegg ttececetee 1080 tectecteag aacaacaage etceagtgee ttecacteeg eggeettegg cetecteaca 1140 ggccccacct ccgccgccac ctcccagcag gcccgggccg cctcctctgc ctccaagttc 1200 cagcggcaat gacgaaaccc caagactccc acagcggaat ctgtccctca gttcgtccac 1260 gecceegtta cettegecag gaegtteagg teetetteet eeccegeca gtgagagaee 1320 cccacctcca gtgagggacc cgccaggccg atcaggcccc ctcccaccac ctcctccagt 1380 aagcagaaac ggcagcacat ctcgggccct gcctgctacc cctcagttgc catccaggag 1440 tggagtagac agtcccagga gtggacccag gcctccctt cctcctgata ggcccagtgc 1500 tggggcacct ccccacctc caccatcaac atctattaga aatggcttcc aagactctcc 1560 atgtgaagat gagtgggaaa gcagattcta cttccatccg atttccgatt tgccacctcc 1620 agagecatat gtacaaacga ecaaaagtta teecageaaa etggeaagaa aegaaageeg 1680 gagtggatcc aaccgaagag aaaggggtgc tccaccactc cctcccatcc cgaggtgatc 1740 tttgcctgct cttctctacc caagctcaag agctgcttct gttgctatct aagaactgca 1800 taccetecte cetgettett ceettgtgee teatgtatgg geaggaggaa aggtgggagg 1860

```
gggagtggga atatgcgtgt gtgggtggga atcggtaaga aatgcaccta gcttttcata
                                                                     1920
ttgtgtttat tctccaggct attgcttgct tcagctgcag cctgcctgtg ctggctgctg
                                                                     1980
gggtcgatag gcttttgtcg taataggcag agatgacttg catcccagct ttccaccaac
                                                                     2040
caaattcaaa cattcactgc ttatttgtta cagactgtaa ttattaaagt ccctqaqaqc
                                                                     2100
tgttttctcc cgttcctttt tcgcatgctt ggcctcctct ctgtttctat gaaccacaga
                                                                     2160
ccacctaagc aagetgetga gtaagggete actggaaact tqcaqtcaca qqatqtccaa
                                                                     2220
tetttggeag teegagettg getetaggae agagetgtee aatagaaata taatgtgage
                                                                     2280
cccatataca atttttacat ttctaatata ttttaaacaa gtgaagttaa tatgcatcca
                                                                     2340
aaatatttca acctgtaatc aacataaaat tttaatgaga tattttatat tattttttgg
                                                                     2400
tactgaatct tcaaaatcca gagtgtattt tacacttacc gcacatctcc attcagacta
                                                                     2460
gtcacatttt taagtgetea gtageeacat gtggetggtg getaetggat tagacageae
                                                                     2520
gagtctggaa gatggaagct agtgcagaaa cctcttgttt aaaaaacaaa aaaqqcaaqa
                                                                     2580
tgggcttgag cgattcaaga ggcaactaaa aataaaatta ggacccagca ccttgtttga
                                                                     2640
cacacagttt gaccttcgat tttcctccct taacttccct cttcccttaa tatctgtata
                                                                     2700
caagtgttgc ttcaaagtac caaggtcaga aattgattca gtacggttta ctaaagtcat
                                                                     2760
gtggaataaa gccattggaa acaaaaaaa aaa
                                                                     2793
```

```
<210> 6345
<211> 3680
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3452)...(514)
<223> similar to gi3299885 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6345 ttttttttta ccgggcacca acgttggttt taatggcatc aacacccagg aggtcacacg 60 tcagttctgg ttggcaacgt ctaggggtga ggggctgtgg cctccagtcg gccccacagc 120 ctttgagaac tggctgcccg gtcccacccg cttcccgccc cgccccactg aaaaaacact 180 aaacgattgc actgacagac agaccccaga gcgcccggcc tcccacacac ccacggggct 240 gtcagagtca accagggctt tggcgtcact cggcggtggc ccggggctgc gcccaggata 300 gtgtttatca aatgtgacac aggttcattt acaaactggg gctctggaag gtctacttct 360 gtggctctaa gagacttgtc tctcatggct tctctcggag ctaccggaag ttggacctgg 420 ataacgctgt gtaggttggt tggtttattt gtaaggaatg tgtaaggcat tttggtaagt 480 tgaacagtaa cttcttttc caaagaggaa actcagacag aggtgccctc ctttgagctg 540 etgeegteet etgeetttte eagetgttee tgeagettet teacegtgte etteteeett 600 gccagctgct cctgggtcgt cttcagaagc tcctgcagtc tcgtggcggc gcgccccagg 660 tcacttgtta acttcttctc tttttctagt ctctccttca gctgtgaggc ctcctctgtt 720 tetgaagact etagggggee ggetgtgegg agetteteca attettettg taacegacat 780 geogaggtet gageeteete aaacteggee gtgagettet geogetgtgt etgeteatee 840 tecaggatgg cttetgteca etceagetge gtetteaget gaacggggte etgetegget 900 gggggcgcct ctggggagga agctggggcc ccagctatgt caccatcctc tacgtggctc 960 ttcatttcac tcaactgctg cctgaccagg gcaagctcat cgctctgttt ctgggcttcg 1020 ctcttggcgg catcgagctg agattgagat tctaggagaa gttgcctcag ccctgccacc 1080 teettggegt agttetggea eteggegetg geggeegeea tgtgetttte eagetetgee 1140 tccaaatgcg acgtgtgctc cctcacctgg tccgaacttt caagttctcc ttttagcttc 1200 tctacaatct cttcgagatg cttcactgtg acccgggact tctggagctc ctcctctgcg 1260

```
gegeceacet tggeceteca cacetgetee tecteeteca egetettetg caggtetetg
                                                                     1320
ageatgeect cegteteege caggatgetg eggtactggt cacactegge etgeagtgtg
                                                                     1380
ctctgcgtct cctcggcctc cctcaacttg gaggccaggt ccgaggaggg ctccgcggga
                                                                     1440
gctggcgggt gcttcagcag cgtggggcct ttctctttga gatcctgcag ccactcggtg
                                                                     1500
taattctgtt gtgccaagac agagagttct gggagcagag ccagcagggc ctccatggtc
                                                                     1560
tgcgcctcaa tcagacagag ctgcttctcc gattcctcct tggcctgggt cagggagtgc
                                                                     1620
agettetect tgeaggeetg eteggeegtg geeagtgeet ceatggeett ceagttette
                                                                     1680
teceggaggt cattgttett caetttetge tgetegaegg cetecetgag etegatggee
                                                                     1740
tectteteca gaccegacae etgggactee ageteettga ggegagtetg etgetggtea
                                                                     1800
geeteegeet ggetggeetg gaegteetgg geateeegeg geetggeeeg ceteeageag
                                                                     1860
ggcctcaatg gaacggattc tctctgtgag ctgggagttc tctgccctgg cctcctggag
                                                                     1920
ctgcccgtgg aggccactca gctcctcgca tttgctgcgc acctccgcct cggaggactg
                                                                     1980
taacttgctg tgcagctcgg ccatctgctg ctgttgctcc tgggccttct cggcatccgc
                                                                     2040
ccggaggctg gcgtggctgc tctgcgtgtg gcacagctcc cggctgacct cgtccaggcg
                                                                     2100
cttctgcagg gcctcctcac tctccctgtg ggacgcctgc agctgcagga cctgcttctc
                                                                     2160
gaaggcaget geettggett ecagagettt eegetgetge teatettgee geacageete
                                                                     2220
tgacttctcc accagctctt tgctgacctt gctgagctcc tgccgaagct tggccagctc
                                                                     2280
tgcgttctgc ttgctctcca cctggctcgt ggcctggttc aaggcatccc gcaggatgga
                                                                     2340
gtteteetge tgeaggeggg ceagetgegt gttggggeea tteteeaget geteetgaag
                                                                     2400
agtccggatc ttgccctgca gctgctgcac ctccttcacg tgctcccggt agctggcctg
                                                                     2460
catgcgtgcc tgcacagccg tgatctcctg ctcccgggcc accagctgct ttttcacttt
                                                                     2520
ggcctccccg gctgctgctt tggccttttc tgctgccatc tccttgttga gctccctcag
                                                                     2580
tttgctcttg gcgacagccg catcttcctg ttctgtggcc agcagttttt ccttcttc
                                                                     2640
cagctggcgt ttcagaatcg ccacagggtc accettctga gtggccttgt gccaggtgtc
                                                                     2700
ctgaatgatg ccagccttct cagacaggat ctcgatgagc cgctgggcct cgccctcgtt
                                                                     2760
gaacaccatg ctcccaaccg tggagaccag cgtcttgtag gggaggtaga gagggccgtc
                                                                     2820
ggcatctggg ggcccttttt tctttgaacc agacttcttc ttggcaggag cctcttgctt
                                                                     2880
tggtgcctct gggctctggg ccacatctgt atttctgccc tccttgggag cagtttccaa
                                                                     2940
gatggcagcc ttcgaagtga gaacctggat ggaattcact acagagctga cagctggttc
                                                                     3000
cacttttgcc actttttct ccttcttctt tttgtccttg ggggaggagg ccagcttctc
                                                                     3060
ctggggcatg gctggaactg tggcgacagg agcaacgata atggggggct gcactggggt
                                                                     3120
tggagccaca gccacagcag gagcccgcac tggttctcga aggaggacag tcacattggg
                                                                     3180
ggctggatca tgatcaggta tcttcccatt aggtttctct tcctttttct tggtctttcc
                                                                     3240
tttcttctcc actgttttct ccttctttt cttctcgact ttctggtggt gagttttcgc
                                                                     3300
catctccttg cgctggttgg ctagggcttc ttcatatgac gtttccttca tggagaaagt
                                                                    3360
cgacaccagg aagatgccaa tggcagaaac aaccatgaat cctccaaaga ccacaacccc
                                                                     3420
caaggtttga gtgtcgtaaa tatccatcct ggcttgcttt cctttcacta ggaggtctgc
                                                                     3480
cccggccttt gcttcaacag agagggaaat ggcacctcca ggacctcaga accggaagct
                                                                    3540
tetttetgea gecagagaeg egagagggaa agegagaggg caggageege egeettegea
                                                                    3600
geegeegegg ageegggaga gaggageegg ccaageetee geeaagaaaa ageeeeegag
                                                                    3660
cagctgtaga cgctgcgact
                                                                    3680
```

```
<210> 6346

<211> 2083

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2084)

<223> n = a,t,c or g
```

```
<221> misc_feature
<222> (424)...(1686)
<223> similar to gi54244 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6346
tatcgcgtaa atctggatgc gcgcgatata agcaaattaa atggttcgtg gccgcatcct
                                                                       60
agagecettt aattagagtt accatttgta gaaggeetge egtgeacaat eeetegttte
                                                                      120
atctcccccc aaaccgagca ggaaagtgaa taaacttaat tgagaatgtc tgaaaacctt
                                                                      180
gacaagtcca atgtaaatga agcaggaaaa tcaaaatcca atgattctga ggaaggcctc
                                                                      240
gaagatgctg tggaaggtgc tgatgaagcc ttacaaaaag caataaagtc agactcctcc
                                                                      300
agcccccaaa gagtgcagag acctcactct agtcctcctc gctttgtgac agtagaagaa
                                                                      360
cttctagaga cagcgagagg cgtcaccaac atggctctag cccatgaaat tgtagtaaat
                                                                      420
ggagactttc agattaaacc agttgaatta ccagaaaaca gcttgaagaa gagagtaaag
                                                                      480
gagattgtac ataaagcgtt ttgggattgc ttgagtgtgc agctaagtga agatccccca
                                                                      540
gcatatgacc atgctatcaa acttgtagga gaaatcaaag agactctctt atctttcttg
                                                                      600
ctgcctggtc atactagact gagaaaccag ataacagaag tcttggatct ggatctgata
                                                                      660
aagcaggaag cagagaatgg ggcgctagac atttccaagc tggcagaatt cattattggc
                                                                      720
atgatgggga cactgtgtgc acctgctcga gatgaggaag ttaagaaact aaaggacatt
                                                                      780
aaggaaatag tgcccctttt cagagaaatt ttttctgtgt tggacctaat gaaagtggac
                                                                      840
atggccaact ttgctatcag tagcatcagg cctcatctca tgcagcagtc agttgaatac
                                                                      900
gaaaggaaga agtttcaaga gattttggag aggcaaccaa attccctgga ctttgtcacc
                                                                      960
cagtggctgg aagaagcctc agaggacctt atgactcaga agtataaaca cgccctgcca
                                                                     1020
gtggggggaa tggctgctgg ctctggggac atgcccaggc tgagccctgt tgctgtccag
                                                                     1080
aattacgctt acctgaagct tctgaagtgg gaccacctcc agaggccgtt ccccgaaaca
                                                                     1140
gttttaatgg accagtctcg cttccacgag ctccagttgc agctgggaac aactgaccat
                                                                     1200
cctgggggct gtgttgctgg tcaccttcag catggcagcg ccaggaattt ccagccaggc
                                                                     1260
cgactttgct gagaaactca agatgattgt gaagattttg ctaacagata tgcacctgcc
                                                                     1320
ctccttccat ctgaaggacg tcctcactac catcggggag aaggtgtgcc tggaggtgag
                                                                     1380
cagetgeete teeetgtgtg ggteetetee etteaceaeg gacaaggaga eegtgeteaa
                                                                     1440
gggccagatc caggccgtgg ccagtcccga tgaccccatt cgcaggatca tggaatctcg
                                                                    1500
aatcctgacc ttcttagaaa cctaccttgc ctcgggtcat cagaagccat tgcccacagt
                                                                    1560
ccctggggga ctcagtccag ttcagagaga gctggaggaa gttgctatta aatttgctcg
                                                                    1620
cctggtcaac tataacaaga tggtcttctg tccctactac gatgcaatcc tgagtaagat
                                                                    1680
cctcgtccga tcctaacgtg tatgcaccct acagcagcag tattactcac tagccacaga
                                                                    1740
atacctgttc tgtactctaa tgttgcattg gaaaatggct atatagtaca tgtctattta
                                                                    1800
acagcaccga ttccaaaggg aagaatattg tgtatcactg ttgaaaagac ttgttgagaa
                                                                    1860
atccactgaa ttctattttg agagattgta tttatgagtg caagtttaca aatcaaagaa
                                                                    1920
gcattttgtt ctcgagtttt acaggtaaca ctcagctgtt gtctccactc ctccccctc
                                                                    1980
tagagccaaa naaaaaaaaa aaaaagggtt ttatgatatt gggttgttga gttccttata
                                                                    2040
tatactggtt atgaaccccc ttgtagcagg tgtgtttatt cag
                                                                    2083
```

```
<210> 6347
<211> 2154
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (30)...(1063)
```

<223> similar to gi3790133 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 6347
getgegeece acgeeageec gegeecegea tggetgeege eggggeeagg cetgtggage
                                                                     60
tgggcttcgc cgagtcggcg ccggcgtggc gactgcgcag cgaggcagtt ccccagcaag
                                                                    120
gtgggcggc ggccggcatg gctgggcgcg gccgggctgc cggggcccca ggccctggcc
                                                                    180
tgcgagctgt gcggccgccc gctctccttc ctgctgcagg tgtatgcgcc gctgcctggc
                                                                    240
cgcccggacg ccttccaccg ctgcatcttc ctcttctgct gccgcgagca gccgtgctgt
                                                                    300
gccggcctgc gagtttttag gaatcaacta cccaggaaaa acgattttta ctcatatgag
                                                                    360
ccaccttctg agaatcctcc cccagaaaca ggagaatcag tgtgtctcca gcttaagtct
                                                                    420
ggtgctcatc tctgcagggt ttgtggctgt ttaggcccca aaacqtqctc caqatqccac
                                                                    480
aaagcatatt actgcagcaa ggagcatcag accctagact ggagattggg acataagcag
                                                                    540
gcttgtgcac aaccagatca tctggaccat ataattccag accacaactt cctttttcca
                                                                    600
gaatttgaaa ttgtaataga aacagaagat gagattatgc ctgaggttgt ggaaaaggaa
                                                                    660
gattactcag agattatagg gagcatgggt gaagcacttg aggaagaact ggattccatg
                                                                    720
gcaaaacatg aatccaggga agataaaatt tttcagaagt ttaaaactca gatagccctt
                                                                    780
gaaccagaac agattettag atatggcaga ggtattgccc ccatctggat ttctggtgaa
                                                                    840
aatattcctc aagaaaagga tattccagat tgcccctgtg gtgccaagag aatattggaa
                                                                    900
ttccaggtca tgcctcagct cctaaactac ctgaaggctg acagactggg caagagcatt
                                                                    960
gactggggca teetggetgt etteacetgt getgagaget geagettggg taetggetat
                                                                   1020
acagaagaat ttgtgtggaa gcaggatgta acagatacac cgtaaaggca tcttaaagcc
                                                                   1080
ttgaaaaatg ttaataatct tttatacctt gcaattccat ttctgggatt ttatcctaag
                                                                   1140
gaaatactta taccaaaaat agaggtgcag agatgttgac ggattgctta cacagtgtct
                                                                   1200
acttattagt gaaacaaaag tgtccagtga cagggaatta aataaatttt ggtacatcca
                                                                   1260
cagaggaagg ctacacagtc ttaattataa cacctatatt gacaacagac ataccattat
                                                                   1320
aggtggtatt catggtatga tcctattctt gtaaaaatat ttgtatgtat gcacagaaat
                                                                   1380
ctgcaaagat gtacacttag tgaactggtt accaacgaat ggtgggacta actaaaatgg
                                                                   1440
tctttttact tatatgtgca tttcttttta taataaaaat gggttatatg cctaatgaag
                                                                   1500
tcaaaccatc tcactctgag catttcccac cctaggtttt taaaacacaa aaatacttag
                                                                   1560
gtaaaactcc caacaaactt gtctgatcat tagctgatta tcacaggctc tagtatgtac
                                                                   1620
tggaagccca gaatatttga gaaataccaa acctcaggtt ggtgagtatg atgaacagga
                                                                   1680
aacccagtaa ttctgaagca gcagtatcac agttggcagg atgaggaaca acagtggctt
                                                                   1740
tgtgatcaca gaactggaat ttaaagaggc tggaccttca gaactgatct tggtcagcca
                                                                   1800
geggeeetge ttacagatga gacactgaaa ggcaaaagge gatggtette cettteegtg
                                                                   1860
tragcattgt atacaggttc cctatcgcac atacaagggt tatggaatgt aagccaaaat
                                                                   1920
1980
aaggggctga cccttggcct attatgtttc tgatacatct gtttaagcaa agcggctcct
                                                                   2040
aagactacac taaggtttct tccatcccct agcaagctca cagttgacaa ttcccagttc
                                                                   2100
teteageace cagtggatge etgecettta agacacattg etgttgatea gtgg
                                                                   2154
```

```
<210> 6348
<211> 2514
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (102)...(2416)
<223> similar to gi4033595 in the genepept database release 114,
```

<400> 6348 tgcggccgcc tcctcttcgg ggtcattaaa gccaatgagc cgcgcgcctc tgccgagcgc 60 120 acceggeace geateageet geteaaceet ttaaatttac aattteegaa teetgtgate 180 ggattaagga agagtttcag tttttacagg ctcaatacca cagtctgaag ctggaatgtg 240 agaaactcgc cagtgagaag acagagatgc agcggcatta tgtcatgtat tatqaaatqt 300 cctatgggtt gaatatagaa atgcacaagc aggcagagat tgtcaagagg ctgaatgcta 360 tetgtgcaca agtcatteet tteetgteec aagagcacca gcaacaagtg gtgcaggetg 420 tggaacgggc caagcaggtg accatggcag aactgaacgc catcattggg cagcaacaac 480 tecaggeeca geatttatea catggacatg gteteceegt acetetgact ceacaceett 540 cagggeteca geeceetgee attecaceca teggtageag tgeegggett etggeeetet 600 ccagtgctct aggaggtcag tcccatcttc caattaaaga tgagaagaag caccatgaca 660 atgatcacca aagagacaga gactccatca agagctcttc agtatcccca tcagccagtt 720 tecgaggtge tgagaageac agaaacteeg cagactacte etcagagage aaaaageaga 780 aaactgaaga aaaggaaatt gcagctcgtt atgacagcga tggtgagaaa agtgatgaca 840 acttggtggt tgacgtttcc aatgaggatc catcttcccc tcgagggagc ccagcacatt 900 cccccagaga gaatggccta gacaagacac gcctgctcaa gaaagatgcc ccgattagtc 960 cagectetat tgeatettee ageagtaete ectecteeaa atecaaagaa ettageetta 1020 atgaaaaatc tactactccc gtctcaaagt ccaatacccc tactccacga actgatgcgc 1080 ccaccccagg cagtaactct actcccggat tgaggcctgt acctggaaaa ccaccaggag 1140 ttgaccettt ggeetcaage ctaaggacce caatggeagt acettgteea tatecaacte 1200 catttgggat tgtgccccat gctggaatga acggagagct gaccagcccc ggagcggcct 1260 acgctgggct ccacaacatc tcccctcaga tgagcgcagc tgctgccgcc gccgctgctg 1320 ctgctgccta tgggagatca ccagtggtgg gatttgatcc acaccatcac atgcgtgtgc 1380 cagcaatacc tccaaacctg acaggcattc caggaggaaa accagcatac tccttccatg 1440 ttagcgcaga tggtcagatg cagcctgtcc cttttccacc cgacgccctc atcggacctg 1500 gaatcccccg gcatgctcgc cagatcaaca ccctcaacca cggggaggtg gtgtgcgcgg 1560 tgaccatcag caaccccacg agacacgtgt acacgggtgg gaagggctgc gtcaaggtct 1620 gggacatcag ccacccaggc aataagagtc ctgtctccca gctcgactgt ctgaacaggg 1680 ataactacat ccgttcctgc agattgctcc ctgatggtcg caccctaatt gttggagggg 1740 aagccagtac tttgtccatt tgggacctgg cggctccaac cccacgcatc aaggcagagc 1800 tgacatecte ggececegee tgetatgece tggccateag eccegattee aaggtetget 1860 teteatgetg cagegaegge aacategetg tgtgggatet geacaaceag acettggtga 1920 ggcaattcca gggccacaca gatggagcca gctgtattga catttctaat gatggcacca 1980 agctctggac aggtggtttg gacaacacgg tcaggtcctg gggacctgcg cgaggggcgg 2040 cagctgcagc agcacgactt ttcacctccc cagtcttttc tctgggctac tgccccaact 2100 gaagagtggc ttgcagtggg gatggagaac agcaatggtg gaagttttgc atgtcaccaa 2160 gccagacaaa taccaactac atcttcatga gagctgtgtg ctgtcgctca agtttgccca 2220 ttgtggcaaa tggttttgta agcactggaa aggacaacct tctgaatgcc tgggagaaca 2280 ccttatgggg gccagtatat ttccagtcca aagaatcctc atcgggtgct tagctgtgac 2340 atcttccgtg gacgacaaat acattgtcac tggctcttgg ggataaggag ggccacagtt 2400 tatgaagtta tttattaaag acaaatcttc atgcagactg gacttctcct cctggtagca 2460 ctttgctctg tcatcctttt tgttcacccc catccccgca tctaaaacca agga 2514

<210> 6349 <211> 2901 <212> DNA <213> Homo sapiens

```
<220>
<221> misc_feature
<222> (113)...(877)
<223> similar to gi2301460 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 6349
aacageetea geteaagegg tggeteeact ggaggaaaac acaceeeggt eteacattaa
                                                                     60
agaagccaaa ctgtcggctt caaagagaaa aggcaacatc ctgtcacagg ccatgctctg
                                                                    120
gcaaaaaccc acagctccgg agcaagcccc agccccggcc cggccatacc agggcgtccg
                                                                    180
tgtgaaggag ccagtgaagg aactgctgag gaggaagcga ggccacgcca gcagtggggc
                                                                    240
agcacctgca cctacggcgg tggtgctgcc ccatcagccc ctggcgacct acaccacagt
                                                                    300
ccttcctgcc tggacatgga aggttctgtg tctgcagtga cagaggaggc tgccctgtgt
                                                                    360
geeggetgge teteceagte caceeggee accetgeage ecetggeece atggacacet
                                                                    420
tacaccgagt atgtgcccca tgaagctgtc agctgcccct actcagctga catgtatgtg
                                                                    480
cagcccgtgt gccccagcta cacggtggtg gggccctcct cagtgttgac ctatgcctct
                                                                    540
ccgccactca tcaccaatgt cacgacaaga agctccgcca cgcccgcagt ggggccccg
                                                                    600
ctggagggcc cagagcacca ggcacccctc acctatttcc cgtggcctca gcccctttcc
                                                                    660
acactaccca cetecaceet geagtacegg ceteeggeee cageeetace tgggeeccag
                                                                    720
tttgtccagc tccccatctc tatcccagag ccagtccttc aggacatgga agaccccaga
                                                                    780
agagccgcca gctcgttgac catcgacaag ctgcttttgg aggaagagga tagcgacgcc
                                                                    840
tatgcgctta accacactct ctctgtggaa ggcttttagg cgtggctccc acctgagtcc
                                                                    900
tgttccctga aactgggatt ttaaaatgag cctggaattg agccccaggt tcatgcttgt
                                                                    960
ttggagtagt catttcatga ctactctttc tacgcacagc tagaattgta gacctgtaaa
                                                                   1020
cetteettee ettetteett eccetecete ecteaettee teeetetee ceateettee
                                                                   1080
attettecce tecetecett etteettee aacceettee tecetecett
                                                                   1140
cettecetec ttecettete ectttecaae ecetteette etttteetee etecetteet
                                                                   1200
teceteette cetteteet tteettett accteette eteceteget tettetet
                                                                   1260
ttcttacttc ttttttcaat tctgttccat tttgggaggt aattataggg attttagcaa
                                                                   1320
taacatttta tgtcaaatgt tgccaagtct gtggtccatg ggctttcatt tctgtcacat
                                                                   1380
ttcatttctt ggaaaaggcc tccttcctcc agtgcctgct gaaccatctt agggtcactc
                                                                   1440
acaccetetg taattttaag atgtatgtgg tggccggcgg gaagaccage cccgacagca
                                                                   1500
cctcctgaga aagtcagcca agggcctacc ctgatgccag agtccttgag ctgtcagttc
                                                                   1560
ccacagttgc tcctttgttt gctcttctca gcctcggcca gatttacagt ccaggcagca
                                                                   1620
aaatctcaag gcctggggct cagagtagta aggggtggga agtgggtggc agggagaaaa
                                                                   1680
gaacatcagg gtgggtgggg acaggccagt gacgaagaga gggacagagg agggatggga
                                                                   1740
acaggctgtg catcttagtt ggagagaggg gtgtggggagg aagcttgagt ttgatgcagg
                                                                   1800
gaggaggaag gctgaggaat gacttggctc cagattactt ggttattaag aagaacaata
                                                                   1860
aactaaagga aagcattgct tgaagagatg gttttgctgc tctccttgag gatacgtgca
                                                                   1920
agggaagttg ggctgttgta aacagggtga agggtgtgtt tggtcggcca tttctctctc
                                                                   1980
acctctaggc cctctgctgg tgctgtggag gccaagaccc cattaagcct aaaggtgatg
                                                                   2040
ggtcctcgcc taggcttagt gctaccatgt gggttttgtt tctttccttc cttccttcct
                                                                   2100
2160
tectteette etteetteet etetettet tetttttt tggtttttt tgggaeggag
                                                                   2220
teteacteeg ttgeecagge tggagtacaa tggtgegate ttggeteact geacetetgt
                                                                   2280
ctcccaagtt caagtgattc tcctgcctga gcctcccgag tagctgggat tacaggtgca
                                                                   2340
tgccaccatg cctggctaat ttttgtattt ttagtagaga cggggtttca ccatgttggc
                                                                   2400
caggctggtc tcgaactcct gaccttgtga tccgcccgcc tcagcctctc agagtgctgg
                                                                   2460
gatcacagge gtgagecace geacecagee ttttaceatg tgggtttett tagtgtetta
                                                                   2520
aaagcgtcca taagccacca ttctgtggaa ccaaggcccc ctccacgcaa acaccctccc
                                                                   2580
tcctggggac ctctggagcc tcagccagaa gtaccattaa gtttaatttt aatttgtttt
                                                                   2640
gctggagaaa catcaggttt gtaggagact gagttgttag caggtgtgct tagctcttga
                                                                   2700
tagtgaacgt gtaccttggg aactggctca cccacctgct aatagcacca tcgtcaccat
                                                                   2760
```

```
taagcagaca tttcagttgg tagaatccat gtagaagtca tggacttttc tgggaaatga 2820 cttttctggg aaatgacagt ttctttgaca tattttcttt gcccacttta aataaaaact 2880 ctggagaaag taaaaaaaaa a 2901
```

```
<210> 6350
<211> 2705
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2351)...(714)
<223> similar to gi3688089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6350 cccagtttat tagaaaaggt gtgaacagag ttgcaccgac aggagtagcc ccagcctct 60 gcccaccctc acccacaccc atgccactcg cccccaaagg gctgtagtgc ctctcagggc 120 gcagcctcca gtggcctgga cagcagggtc ccggagtgcc ggctgctccc gccccagctc 180 cctgatagat ttattgcact tgagaaaaag aaagctctga tcctctgctc ccatccccc 240 accetgeeeg geetgegetg tetggggetg ttetgegeat etcaaceace accageaege 300 acceptete eggeaceagg etgeetgeee ggeeetgtge eeggggeeae aggggaceat 360 cccaccacca cccaggacgc ctgccctccg cagggcaagc ctggcccctc cagaacaggc 420 geetgatgte ettggagace teeteeteet eetgeteece eteeteecat teaceceag 480 agtcttccag tgctgggctc ataaatagaa gtgcttgagt cacgcgcgga gggccactcc 540 ctgtagctcc tgcacccctt gtagtgttgc tgtgggggga ggggggcccc agaatggccc 600 ccacccctgg catcctgggc ctcaggaagg ctggggggaa ggtgagcaga ttctcatggc 660 tctggcctca gctcatcgca gaccgaccgg aaaaagggaa ctaaagtgtc acagtgtctc 720 ctgcccggat tcctgactgg cttccagaag cagctcctcg agctccttct cgttcttgga 780 gcagctcagt tcgtgctcca ggccgcagct gcccccttg acctcaggcc ccgggggcgg 840 ctcagggggc agtgccaggg cgaactcggg cttcaggccg ttgggcagtg gtggcctga 900 ccgaggcggc tccggtggtg gctgaggctc agaggaccct gtgtcccggg tgtcaatggc 960 cccggagggg gtctcgtccc tctccccttc ctcttcctcc tcttcctccc catccgagtc 1020 cgagtctgag tctgagtccg ggctgggtgc ggggctgggg gccccgttct gcaccccage 1080 ggcgggctcg tcgtcgggct ggggctcggt ggcggtggtc tcaggcatgg aggccgacag 1140 ctgtggcggc tgctccttct cctccctctc ccgcgccagc accaagttgc gcttgcagcc 1200 gttctggatc tcggccagca gcgccttctg cgtctcgatg aagctcttca ccgcctcttt 1260 cttgggttca cggtcgaggt ccaggcgcag cagtgagtgg ttcaccttga gggccaacga 1320 cagtgccatg agecegeetg tettgatete gtteteeega aggteeagte teaggaggeg 1380 ggggctctca gcgatgaact ccgccaccgc caccgcgccc tcgcacgtga gcttggtgga 1440 ggccagcceg aggcgcagca cgctgcggtt gctgatgagc ccgttcttga ggtgccgcac 1500 accetegate ecgatggggt tgtggcccag gttcagcgte tccaggetet gagtgtgcgg 1560 cagtgtcatg cccaggaagg ccatgcctgt gtgcgtgagc tggttgttcc acagcaccca 1620 gggtcaccag ccccttcctc tgctccttga ggccctcgca gatgtaggcc agacccgagt 1680 ctagcacgtg gttgttccgg aggtccagga tctgcaggga gcagttgaac ttgagcaggt 1740 tacccagctg ggccgagtcc tgcaggccgt tgagcttgtt gtccgcccag gtacagctcc 1800 cgcaggttca tgttcatctt cagggccgtg gcgagcagca tgaggggccg ccccgacagg 1860 ctggcgttct ccaagtgcag cactgccagg ctgctgcgga tgcgcagggc acgggccacg 1920 aagggcgccg agtggtccag caggggcgtg ttgcgggcgt cccagatact gcaggcagct 1980 cgtcttgcgc atcatgtggg cggccgcctg ccagccccgg gtgccgatgt gcttgttgaa 2040

```
ggagatgttg aggtgggtgg ccgactcgta gtactcgatc atgtcgaaga qqqccgaqqc
                                                                    2100
accatettea tecaggittg tetgetecag giccaegace tigaactgea geetettgaa
                                                                    2160
gacctettee agggeeteae aggtettgta gteaagette teaeetttea ggteeagaca
                                                                    2220
gtcgaggcgg tgcccgaggt ctgtgaattc ctgcagctgc ctgaggagct tggggatctg
                                                                    2280
cctgcagttc agcttctggc aggcctgctt gtaggcgccg atgacctcqt ccacqqtcac
                                                                    2340
attctgggca tgtctccagg ggtctttggg ctccactgct ccagacacga tatcctcgtc
                                                                    2400
ggacgggaat gtgacgcgct tggctgcagc cttgaggcgc ccatcggcgg ggggcgacgc
                                                                    2460
ggggctggga gacccggcct cagctggggc ctcttcaatg tcgccgtccg cqcccqqcac
                                                                    2520
gggcggcgcc teetgeggcg cgatetecat agecgecgcc geeteeteac gggggececg
                                                                    2580
gggacatgcc ccgggccccg gatttgtctc tccgggtccg cccgccgtcc cgqggcatqq
                                                                    2640
geteegeege egetteagge geegeeteeg teegetetee tagtggtegt agteqtegee
                                                                    2700
gccgg
                                                                    2705
```

```
<210> 6351
<211> 403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (103)...(405)
<223> similar to gi300478 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6351

caagcccgaa tttcttaatc tgttacctat ctcggcataa ttcttcataa aaacacaggt 60
gctctccctg ccgatcctgt ccaactgatc tctcaaaccc caaccccttc tacaaacaa 120
caactccttt ccttcggg catggttgga tacttttacc tttggatacc tggttttgcc 180
atcctaacaa aaccattatg taaactcaca aaagaaaacc tagctgatgc catagatcct 240
aaatcctttt cccactcctc tttccgttcc ttgaagacag cattagagaa tgcttcaca 300
ctagctctcc ctgactcatc ccaacccttt ttcattacac acagccgaag tgcagggctg 360
tgtggtcgaa attcttacac aaggactggg accgctccct gtg
```

```
<210> 6352
<211> 1415
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (124)...(472)
<223> similar to gi2822179 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6352
egeettgeag egeeetgeaa gaatteggea egageegtgt tgtaeggegg ettetegege
                                                                       60
agctgatgac ctggaagtga tgcctaaagc tgtggaccgc gtgggctcgc ctccctggga
                                                                      120
ctaggtttca gcggccgctg cgatgaccaa aataaaggca gatcccgacg ggcccgaggc
                                                                      180
tcaggcggag gcgtgttccg gggagcgcac ctaccaggag ctgctggtca accagaaccc
                                                                      240
categegeag eccetggett etegeegeet eaegeggaag etetaeaaat geateaagaa
                                                                      300
agcggtgaag cagaagcaga ttcggcgcgg ggtgaaagag gttcagaaat ttgtcaacaa
                                                                      360
aggagaaaaa gggatcatgg ttttggcagg agacacactg cccattgagg tatactgcca
                                                                      420
teteccagte atgtgtgagg accgaaattt geectatgte tatateeeet etaagaegga
                                                                      480
cctgggtgca gccgcaggct ccaagcgccc cacctgtgtg ataatggtca agccccatga
                                                                      540
ggagtaccag gaggcttacg atgagtgcct ggaggaggtg cagtccctgc ccctacccct
                                                                      600
atgaggggct ccggtagcac ctgggcacct gccgctggaa gctattgggc tggcagcagg
                                                                      660
acgactggct gtcctcctgc ccacccacac tgacggcatc ttcccagttc cccaaggcac
                                                                      720
gccttcttcc caggcagctc taacagccct ttcatgaagg taatgctagt cttctgtcca
                                                                      780
tcagtgccat ttcctgtaga actaaaggct gttccaagaa tgtggggtgg ggaaagtaaa
                                                                      840
tgctaagact aaaatgtggt gagtctgtgg gtgttttctt aagcagcagc tgctggttgg
                                                                      900
gccagcgagt tggtgggcgg gaagagtgaa gcagtcttcc tcagcagaga gcccaaagga
                                                                      960
ctcagagggt tctgtgctga tgctcagctg cccagggctg ggtgctttgg ctcaagctga
                                                                     1020
gaactgatcc tgctgctatc ccagcatttt caactccctc ttccagggta gatgggggct
                                                                     1080
gtgaggtaag gcagggggcc cagacccact tcatggaagc ctaaagcccc cacatcagga
                                                                     1140
acacccccat tcctaactta acccaggage cttaaatgee actgtgaage ttatggaage
                                                                     1200
aatttaccca cccacacagc acattttaaa taggaatatg aagctaaaat gcattcccc
                                                                     1260
gagetetett gettaacata atggeeetag taacceaate eetteaagta ttttagaett
                                                                     1320
ggggcccctt cctgctgtca gaggcccagc acaggactca gtatacataa cagccaagtt
                                                                     1380
caggcaccct ggaataaact ggaaatagca cgaaa
                                                                     1415
```

```
<210> 6353
<211> 5868
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (222)...(5433)
<223> similar to gi5052123 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6353
agtccaggat gttgttaatt cagcatgcca atcagagaac ttgctctctg catgtggcac
                                                                       60
ttcagtggtg tttttgctaa tgcatgtatt caacttttaa tgcctagccc caggatatag
                                                                      120
tttgcaggca ctttaaatta aatggttgca gatggaatgg gaagttagag taaggtgtag
                                                                      180
aaaattcatt tetteteeeg accetetett gettttetee taggettgge actgetgeae
                                                                      240
caccaaaggc aaacttcatt gaagctgaca agtattttct tccattcgag ctagcttgcc
                                                                      300
agtccaagtc cccaagggta gtcagcacat cccttgactg cttgcagaaa ctcatcgcat
                                                                      360
acgggcacat cactggcaac gcccctgaca gtggagcccc tgggaagcgg ctgatcgaca
                                                                      420
gaattgttga aaccatttgc agttgttttc agggccctca gactgatgaa ggggttcagt
                                                                      480
tacaaataat taaggctctt ctgactgcag tgacttcccc acacattgaa attcatgagg
                                                                      540
gtactatect geagacagtg agaacatgtt acaatateta tttggeeage aaaaatetea
                                                                      600
tcaatcaaac cactgccaag gctaccctta ctcagatgct gaacgtcatt ttcacccgca
                                                                      660
```

```
tggaaaacca agtgttgcag gaggccagag aactggaaaa accaatccag tcaaaacccc
                                                                     720
agteceetgt gatecaaget geageagtat ecceaaagtt egttegtttg aageacagte
                                                                     780
aggcacaaag caaaccaaca actcccgaaa aaacagattt aaccaacggt gaacatgcca
                                                                     840
ggagtgatto tggaaaagta agcacagaaa atggagacgc acccagagaa agaggctcat
                                                                     900
cactgtcagg gactgatgac ggagcccagg aggtggtgaa ggacatcttg gaagatgtag
                                                                     960
tcacatctgc cattaaagaa gcagcggaaa agcatggtct gacagaacct gagagagttc
                                                                    1020
taggtgaact ggagtgccag gaatgtgcta ttcccccagg agttgatgaa aactcacaga
                                                                    1080
ccaacgggat agccgatgac aggcagtcct tgtcgtcagc agataatctg gaatcggatg
                                                                    1140
cacaaggaca tcaagtggct gccaggttct cccacgttct gcagaaggat gccttccttg
                                                                    1200
tgttccgctc cctgtgcaag ctgtccatga aaccccttgg tgaaggccct ccagacccaa
                                                                    1260
aatcccatga gctgcgttcc aaggtggttt ccctgcagct gctcctctct gtgttgcaaa
                                                                    1320
atgctggccc cgtattcagg actcacgaga tgttcatcaa tgcaatcaag caatatctct
                                                                    1380
gtgtggcctt gtccaaaaac ggcgtctctt cagtgcctga tgtctttgag ctctctcttg
                                                                    1440
ccatttttct tactcttctt tcaaacttta aaatgcactt gaaaatgcag atagaggtct
                                                                    1500
ttttcaaaga gattttcctg aacattttag aaacatcaac aagttctttt gagcacaggt
                                                                    1560
ggatggtcat tcagactctg acgaggatct gtggagatgc ccagtgtgtt gtggatattt
                                                                    1620
atgtcaacta cgactgtgat ttaaatgctg ctaacatttt tgagcgcctt gtaaatgatt
                                                                    1680
tatccaaaat tgctcaggga agaagtggac atgagctggg aatgacacct ctgcaggagc
                                                                    1740
tcagcctgag gaagaaaggc ctggagtgcc tcgtgtccat tctcaagtgc atggtggagt
                                                                    1800
1860
cggatcagga aataggggat gggaaaggcc ttgacatggc aagacggtgt agtgtgacgt
                                                                    1920
ccatggagtc cacagtgtcc tcggggaccc agacaactgt tcaggatgac cctgagcaat
                                                                    1980
ttgaggtcat caagcaacaa aaagaaatca ttgaacacgg catcgagctg ttcaacaaga
                                                                    2040
aacccaagag gaggatccag tttctccagg agcagggcat gctgggaacg tcagttgaag
                                                                    2100
acatagecea attectgeae caggaggage geetggatte cacceaagta ggegattte
                                                                    2160
tgggagatag cgcaaggttc aacaaggagg tgatgtatgc ctacgtggac caacttgact
                                                                    2220
tctgtgaaaa agaatttgtc tcagccctgc ggacattcct agaaggtttc cgcctacctg
                                                                    2280
gagaagccca aaagattgac cgattaatgg agaagtttgc cgcaagatac atagaatgca
                                                                    2340
accaagggca aactctgttt gctagtgctg acactgctta tgtcctagcg tattcaatta
                                                                    2400
ttatgctgac tacagacttg cacagtcctc aggtaaaaaa taaaatgacg aaagagcagt
                                                                    2460
atattaaaat gaatcggggt atcaatgata gtaaagatct gccagaagag tatctctcaa
                                                                    2520
gcatctatga agagatagaa ggcaaaaaaa ttgcaatgaa agaaacaaaa gagctaacga
                                                                    2580
ttgcaaccaa atctactaag cagaatgtag ctagtgaaaa gcagcggcgg ctgctgtaca
                                                                    2640
acttagagat ggagcaaatg gctaaaacag ccaaagctct gatggaggct gtgagccatg
                                                                    2700
ccaaagcccc gtttaccagt gccactcacc tggaccatgt ccggccaatg ttcaaactgg
                                                                    2760
tgtggacgcc actattggca gcctacagca tcggactcca gaactgtgat gacactgaag
                                                                    2820
tggcctcctt gtgtttggaa ggcatccgat gtgcaatccg aatcgcctgc atctttggaa
                                                                    2880
tgcagctgga acgagatgcc tatgttcagg ctcttgctcg cttctcccta ctcacagcca
                                                                    2940
gctccagcat cacaaaaatg aagcagaaaa acatcgacac cattaagacg cttatcacag
                                                                    3000
tggctcacac cgatggcaac taccttggga attcctggca tgagatcttg aaatgcatca
                                                                    3060
gccagctgga gctcgctcag ctgataggaa ccggtgtgaa gacgcgctac ctgtctggat
                                                                    3120
ctgggcgtga aagagaaggg agcctgaagg gccacacatt ggcaggagaa gagttcatgg
                                                                    3180
gccttggcct cggtaatttg gtgagtggcg gagtgaataa aagacagatg gccagcttcc
                                                                    3240
aagaatcggt tggtgagacc agctcgcaga gtgtggttgt agctgtggac aggattttta
                                                                    3300
ctgggtctac cagactggat ggaaatgcaa tagttgactt tgtccgctgg ctgtgtgctg
                                                                    3360
tgtccatgga tgaactggct tccccccacc atcctcgcat gttcagcttg cagaagattg
                                                                    3420
tggagatatc atactacaac atgaatcgga tccgactaca gtggtctcga atatggcatg
                                                                    3480
tgattggaga tcacttcaat aaggttggct gcaaccctaa tgaagatgtg gctatctttg
                                                                    3540
ctgttgactc attaaggcaa ctctccatga agtttcttga gaagggtgaa ttagccaact
                                                                    3600
teegttteea gaaagatttt etgaggeeet ttgageatat tatgaagaaa aacaggtete
                                                                    3660
ccaccatccg ggacatggcg atccgctgca ttgcccagat ggtgaactcc caggcggcca
                                                                    3720
acatecgete aggetggaag aacatetttg cegtgtteea ecaggeagee tetgateatg
                                                                    3780
atgggaacat tgtggagctg gccttccaga ccacttgcca cattgtcaca actattttcc
                                                                    3840
agcaccattt teetgeagee ategatteet tteaggatge tgtgaagtge ttateagagt
                                                                    3900
tegeetgeaa egeegetttt eeetgacaeg ageatggaag egattegget eateegette
                                                                    3960
tgtggcaatt atcttctctg agaggcctcg ggtgctacta gaatacacaa gtgatgacat
                                                                    4020
gaatgtaget eetggtgaca gagtetgggt eegaggetgg tteeceatet tattegaact
                                                                    4080
```

```
ctcctgcatc attaatagat gcaagttaga tgtacgaaca aggggactca cagtcatqtt
                                                                     4140
tgagatcatg aagagctatg gccacacctt tgaaaagcac tggtggcagg acctqttcag
                                                                     4200
aatcgtgttt cggatttttg acaatatgaa actccctgag caactgtcag agaaatctga
                                                                     4260
gtggatgaca acaacctgca atcacgcact ttatgctatt tgtgatggtt ttacccaqtt
                                                                     4320
ttatgaagct ttgaatgaag ttcttctttc tgatgtattt gcacaattgc agtggtgtgt
                                                                     4380
caaacaagat aatgaacagt tggcgcgatc aggtacaaat tgcttagaaa acttagtaat
                                                                     4440
atccaatgga gagaaattca gtcctgaagt ctgggatgaa acctgcaact qtatqttqqa
                                                                     4500
tattttcaaa acaaccatcc cacatgtttt gctgacatgg agacctgtag gaatggagga
                                                                     4560
agattcatca gaaaagcatt tggatgtgga tctggaccgc cagtctttaa gcagcataga
                                                                     4620
taaaaatccc tctgagaggg gacagagcca gctctctaac ccaacagatg acagctggaa
                                                                     4680
gggtagacca tacgcaaatc agaaactgtt tgccagcctc ctcatcaagt gtgtggtcca
                                                                     4740
gttggaattg atacagacca ttgacaacat tgtgttctac cctgcgacga gcaaaaagga
                                                                     4800
ggatgcagag cacatggttg ccgcccagca agacacgctq gatgcagata tccacataga
                                                                     4860
gacggaggat cagggcatgt ataagtacat gtcttcccag cacctcttca agctgttgga
                                                                     4920
ctgtttgcag gaatcccatt cattctcaaa ggccttcaac tccaattacg agcagcggac
                                                                     4980
tgtcctgtgg cgagcaggtt ttaagggcaa gtctaaaccc aatcttctaa aacaagaaac
                                                                     5040
cagcagectg gcctgttgtt tgaggatect gtttcgaatg tatgttgatg agaaccgcag
                                                                     5100
ggattcctgg gaagaaatac agcagagact tttaactgtt tgcagtgaag ctcttgccta
                                                                     5160
tttcatcact gtgaattctg agagccatcg ggaggcctgg acaagtctct tgttgttact
                                                                     5220
tctaactaaa accctcaaaa taaatgatga aaagttcaaa gcacatgctt caatgtacta
                                                                     5280
cccctacttg tgtgaaatta tgcagtttga cctgatccct gagctccgag cagttctgcg
                                                                     5340
gaagttette etaeggatag gtgttgtgta taagatatgg ataccagaag agecateaca
                                                                     5400
ggtacccagc agcactgtca ccagtgtggt agccctggct gcccaggcca gtgctgcagc
                                                                     5460
tctgcagaat gttcagcatg ccatttctga ctggcacatc tcgtgaagtt tcatagaaac
                                                                     5520
aaggagttgg catcttggat ctcagaatgg cctggaaacg gatggcctct acgctgttcc
                                                                     5580
atcacagtet ccaactaagg ettatggtat tteattaaac tgttgcatac ccagttagca
                                                                     5640
cagtaggtgg ggagtctgct tcatttctat cattccattt ttctgattaa actgtcaaat
                                                                     5700
ctgtcattgc atatgccatc gttttctagc aaaatcccat gattggctat aaacgttttg
                                                                     5760
taagaagtca ctctccttga aaatactgaa catagctgta taggtttgtg attattagag
                                                                     5820
aatatgttaa taaaacttct tgtaacggct aactgccacc taaaaaaa
                                                                     5868
```

```
<210> 6354
<211> 6087
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (85)...(5889)
<223> similar to gi34844 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6354

gaattccgtg ggcggaggtc tgggatctcc tggctgttgc tgtcttctgc tctcatcctg 60
caggtgggac tctcagctga caccatgagt agtgacactg aaatggaagt gttcggcata 120
gctgctcctt tcctccggaa gtcagaaaag gagaggatcg aggctcagaa ccagcccttt gatgccaaga cgtattgctt cgtggtgac tcaaaggaag aatatgccaa ggggaaaatc 240
aagagttctc aggatggaa ggtcactgtg gaaactgagg acaacaggac cctggtggtc 300
aaaccagagg atgtgtacgc catgaacccc cccaagttcg acaggatcga agacatggcc 360
atgctgacgc acctgaatga gccagccgtg ctgtacaacc tgaaggaccg ttacacatct 420
```

```
tggatgatct atacctactc aggcctcttc tgtgtcactg tcaaccccta caagtggctg
                                                                      480
ccggtgtaca accccgaggt ggtggaaggc taccgaggca aaaagcgcca ggaggccca
                                                                      540
ccccacatct tctccatctc tgacaacgcc tatcagttca tgctgactga tcgtgaaaac
                                                                      600
cagtccattc tgatcacggg agaatccggg gcaggaaaga ctgtgaacac caaacgggtc
                                                                      660
atccagtact ttgcaacaat tgcagctact ggggacctgg ccaagaagaa ggactccaaa
                                                                      720
atgaagggga ctctggaaga tcaaatcatc agtgccaatc ccctgctgga ggcctttggg
                                                                      780
aacgccaaga ctgtgaggaa tgacaactcc tcccgttttg gcaagttcat ccgaatccat
                                                                      840
tttggaacca ctgggaagct ggcctctgca gatattgaaa cttatcttct ggaaaaatca
                                                                      900
agagtcactt tccagctgaa ggctgaaaga agctaccaca tcttctacca gattctttct
                                                                      960
aacaagaagc ctgagctcat agagctgctg cttattacga ccaaccctta cgactacccg
                                                                     1020
ttcattagcc agggggagat cctggtggcc agcatagatg atcgagagga gctgctggct
                                                                     1080
acagacagcg ccattgacat cctgggcttc accccagaag agaaatctgg gctctacaag
                                                                     1140
ctgacgggag ccgtgatgca ctacgggaac atgaagttca agcagaagca gcgagaggag
                                                                     1200
caggccgagc cggatggcac agaagtggct gacaaaacag cctatctgat gggcctgaac
                                                                     1260
tetteggace teetaaaage tttgtgettt eetagagtga aagttgggaa tgagtaegtt
                                                                     1320
accaaaggtc aaactgtgga tcaggttcac catgctgtga atgctctttc aaaatcagtt
                                                                     1380
tatgaaaagt tgttcttgtg gatggtcact cgcattaacc agcaactgga tacgaagctt
                                                                     1440
ccaagacaac acttcattgg tgttttggac attgcaggct ttgaaatctt tgagtataac
                                                                     1500
agcctggagc agctgtgcat caacttcacc aatgagaaac tgcaacagtt tttcaaccac
                                                                     1560
cacatgttcg tgctggagca ggaggagtac aagaaggaag gcatcgagtg gacgttcatt
                                                                     1620
gacttcggga tggacctggc tgcctgcatc gagctcatcg agaagcctat gggcatcttc
                                                                     1680
tecateetgg aagaggagtg catgtteece aaggeaacag acaceteett caagaacaag
                                                                     1740
ctgtatgacc agcatcttgg aaagtccaac aacttccaga agcccaaggt ggtcaaaggc
                                                                     1800
agggcagagg ctcacttctc actgatccac tatgcgggca ccgtggacta cagtgtctca
                                                                     1860
ggttggctgg agaagaacaa ggaccctctg aacgagactg tggttgggct gtaccagaag
                                                                     1920
tettecaaca ggeteetgge acacetetat gecaegtttg ceaeggegga tgetgaeagt
                                                                     1980
ggaaagaaga aagttgccaa gaagaagggt tetteettee aaactgtete tgeeetttte
                                                                     2040
agggaaaacc tgaacaagct gatgtcaaat ttaagaacta ctcaccctca ttttgtgcgt
                                                                     2100
tgtataattc ccaatgaaac caaaactcca ggggctatgg aacacagcct tgttctgcac
                                                                     2160
cagctgcggt gtaacggtgt cctggagggc atccgcatct gcaggaaagg gttcccaaac
                                                                     2220
aggattetet atggagattt taaacaaaga taccgagtge tgaatgeeag tgeaateetg
                                                                     2280
gagggacaat tcattgacag caagaaagcc tgtgaaaagc ttctggcatc cattgatatt
                                                                     2340
gaccacactc agtacaaatt tggacatacc aaggtgttct tcaaggctgg cttgctggga
                                                                     2400
accetggaag agatgeggga tgacegeetg gecaaactaa teaceeggae acaagetgtg
                                                                     2460
tgcagagggt tcctcatgcg tgtggaattc cagaagatgg tgcagaggag ggagtccatc
                                                                     2520
ttctgcatcc agtacaacat tcgctcattc atgaacgtca agcactggcc ctggatgaaa
                                                                     2580
ctcttcttca agatcaagcc cctcctcaag agtgcagaga ctgagaaaga gatggccacc
                                                                     2640
atgaaggaag aattccagaa aaccaaagat gaactcgcca agtcggaggc aaagaggaag
                                                                     2700
gagctagagg aaaaactggt gactctggtc caagagaaaa atgacctgca gctccaagta
                                                                     2760
caagctgaaa gcgaaaattt gttggatgct gaggaaagat gcgatcagct gatcaaagcc
                                                                     2820
aaattccagc tcgaggccaa gatcaaggag gtgacagaga gagctgaaga tgaggaggag
                                                                     2880
atcaatgctg agctgacggc caagaagagg aaactggagg atgaatgctc agagctcaag
                                                                     2940
aaagacattg atgaccttga gttgaccctg gccaaggttg agaaggagaa gcatgccaca
                                                                     3000
gagaacaagg ttaaaaacct tactgaggaa ctctctgggt tagatgaaac aattgcaaag
                                                                     3060
ttaaccagag agaagaaggc cctccaagag gcgcaccagc aggccttgga tgacctccaa
                                                                     3120
gctgaagaag acaaagtcaa ttctttgaac aaaaccaaga gcaaactgga acagcaagtg
                                                                     3180
gaagacctgg aaagctccct agaacaagaa aagaagctcc gcgtagacct ggaaaggaac
                                                                     3240
aaaaggaaat tggaaggaga cttgaagctt gctcaagagt ccatattaga tctggagaat
                                                                     3300
gacaagcaac agctggacga aaggctcaag aagaaagatt ttgaatattg tcaacttcaa
                                                                     3360
agcaaagtgg aagatgagca gacactgggc ctccagtttc agaagaaaat caaagagttg
                                                                     3420
caggetegaa tegaggaget ggaagaggag atagaggegg agagggeeae eegegegaag
                                                                     3480
acagagaaac agcgcagcga ctatgcccgg gagctggagg agctgagcga gcggctggag
                                                                     3540
gaggcgggag gcgtcacctc cacgcagata gagctcaaca agaagcggga ggcggagttc
                                                                     3600
ctgaagctgc gcagggacct ggaggaggcc acactgcagc acgaagccat ggtggccacg
                                                                     3660
ctgaggaaga agcatgcgga tagtgtggcc gagcttgggg agcagattga caacctgcag
                                                                     3720
cgggtcaagc agaagctgga gaaggagaag agcgagttca agctggagat cgatgacctc
                                                                     3780
tccagcagca tggagagtgt gtcgaaatct aaggcaaatc tggaaaaaat ctgccgaacc
                                                                     3840
```

```
ctggaggatc agttaagtga ggccaggggc aagaatgagg aaattcagag gagcctgagc
                                                                     3900
gagetgaeca cacagaagte tegtttgeag accgaggetg gtgagetgag tegteagetg
                                                                     3960
gaagaaaaag aaagcatagt atcccaactt tccaggagca agcaagcctt tacccagcaa
                                                                     4020
acagaagagc tcaagaggca gctggaggaa gagaacaagg ccaagaacgc cctggcgcac
                                                                     4080
gccctgcagt cctcccgcca cgactgtgac ctgctgcggg aacagtatga ggaggagcag
                                                                     4140
gaaggcaaag ctgagctgca gagggcgctg tccaaggcca atagtgaggt tgcccagtgg
                                                                     4200
agaaccaaat acgagacgga cgccatccag cgcacagaag agctggagga ggccaagaaa
                                                                     4260
aaacttgctc agcgccttca agattccgag gaacaggttg aggcagtgaa tgctaaatgt
                                                                     4320
gcttcactgg agaagaccaa gcagaggctg caaggagagg tggaggatct gatggttgat
                                                                     4380
gttgaaagag ccaattcctt ggccgccgct ctggacaaga agcagaggaa ctttgacaag
                                                                     4440
gtgttggcag agtggaagac aaagtgtgag gagagccaag cagagctgga ggcatccctg
                                                                     4500
aaggagteee geteettgag caetgagete tteaaaetga aaaatgeeta egaggaagee
                                                                     4560
ttagatcaac ttgaaactgt gaaacgggaa aataagaggt tagagcagga gatagcagat
                                                                     4620
ctcacagaac aaattgctga aaatggcaaa accatccatg aactggagaa atcaagaaag
                                                                     4680
cagattgagc tggaaaaggc tgatatccag ctggctctcg aggaagcaga ggctgctctt
                                                                     4740
gagcatgaag aagccaagat cctccgaatc cagcttgaat tgacacaagt gaaatcagaa
                                                                     4800
attgatagaa agatcgccga gaaggatgaa gagatcgagc agctgaagag gaactaccag
                                                                     4860
agaacagtgg aaaccatgca gagcgccctg gacgccgagg tgcggagcag gaatgaagcc
                                                                     4920
atccggctca agaagaagat ggagggggac ctgaatgaaa tcgagatcca gctgaqccac
                                                                     4980
gccaaccgcc aggcggcgga gaccctcaaa cacctcagga gtgtccaggg acagctgaag
                                                                     5040
gatacgcagc tccacctgga tgatgccctc cggggccagg aggacctgaa ggagcagctg
                                                                     5100
gcgattgtgg agcgcagagc caacctgctg caggccgagg tggaggagct gcgggctact
                                                                     5160
ctggagcaga cggagaggc ccggaaactg gcggaacagg agctcctgga ctccaacgag
                                                                     5220
agggtgcagc tgctgcatac ccagaacacc agcctcatcc acaccaagaa gaagctggag
                                                                     5280
acagacetca tgcagetcca gagtgaggta gaagatgcca gcagggatgc aaggaacget
                                                                     5340
gaggagaagg ccaagaaggc catcacggac gctgccatga tggcggagga gctgaagaag
                                                                     5400
gagcaggaca ccagcgccca ccttgagcgg atgaagaaga acctggaaca gacggtgaag
                                                                     5460
gacctgcagc atcgtctgga tgaggccgag cagctggcgc tgaagggtgg gaagaagcag
                                                                     5520
atccagaaac tggagaccag gatccgagag ctggagtttg aacttgaggg agagcagaag
                                                                     5580
aagaacacag agtctgttaa gggcctgagg aattattgag cggagggtca aggagctgac
                                                                     5640
gttcccagag tgaagaggac aggaagaatg tgctgagatt gcaggatctg gtggataaac
                                                                     5700
tgcaagtgaa agtcaagtcc tacaagaggc aggcggagga ggctgatgaa caaqccaatq
                                                                     5760
ctcatctcac caaattccga aaggctcagc atgagctgga ggaggccgag gaacgtgcgg
                                                                     5820
atategeaga ateteaagte aacaagetee gegetaagae tegagaette aceteeagea
                                                                     5880
gggtgagtcg ctgagctggg aggagcccc ctccagggac tgtagaaact tcttagctgg
                                                                     5940
aaggaacctc agagaaccct ttactttaga gctggggagt ctcaggctca ggaagagaaa
                                                                     6000
gtgcttaaag tcacttagct gactggaccc tcgctagaat cctggtctgt gagtcacaat
                                                                     6060
aaaaaccgcc atcctgcaca tgtaccq
                                                                     6087
```

```
<210> 6355
<211> 1803
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1704)...(416)
<223> similar to gi3413320 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6355
ttttttttt ttcaagtttg agaaatgtag ttttattaat agaagggcat gtcttaccat
                                                                      60
acacactgtc cccagataaa taaaatccca acatctttga aagcacacaa acacacaqtt
                                                                      120
ttacagggta caatacaaag tgaactttga tgatgttctt acttgcattt actaaaaatc
                                                                      180
tgagaaagac tgtaatcagt ctttaaataa ttatcttgac gtaaagagga aaagtaggag
                                                                      240
gcacaatata tatatatcac aaaccaaatc acactctctg gtaacattta caacaggggg
                                                                      300
atttacttaa tccaaaaatt aaaaggcaaa ctgggctgga gggagggctg gtatcatttt
                                                                      360
ttttctccaa tatttacggc taaatttcta tttttgggca tgaaatttat taaacctttt
                                                                      420
tccattagta gggcaaatgt gctctgcaaa ttctcggatg ggcaccacgg ccaccattac
                                                                      480
atttgcaaat gtatccaaca gccttctggg cagtagaaca ggcatcagca ggagcgccac
                                                                      540
ttaggcccac tctcttcaag cactcttcat cagacacttc atttccaaga tatgccactt
                                                                      600
ctttccagca caggcccatt tcttttctcc attcatctac aactgctagc ttgtctgata
                                                                      660
cactgacttc cattttgcaa tccagtttta aagaagacag cgtctgcttt gaacaggccc
                                                                      720
tttctgagat tagcctcacc tcaataccac ttttctttaa taaacttatc ccaatagcat
                                                                      780
cttttacatc ataagatatt atttcttttt ggtctcctga tacataaatg tggccattgg
                                                                      840
tgagacatcc atcaatattg caaaccaaaa gttttatttc cttaagcttc tctttgccaa
                                                                      900
aatagccata tettaataet etttgetetg caataggeca atcaatatee acatetatat
                                                                      960
ccacactatg ttcagctcgc atttcgtagt atgccatttt tccaccctgc aagtaaccca
                                                                     1020
tctctatcaa atgtctttta gcaaaataaa atgagccatt ttcatataat tctccatccc
                                                                     1080
agtettgteg acgaggeegt ttagetggat ttaaatteag aggtteggte aetteacgaa
                                                                     1140
etectitetg aattteacte categaaact gatggegtet cacaacaqaq aaaacaqaat
                                                                     1200
catateette ttetegaate atttetgeaa etttttgaag ateagtagga tgtaaacatg
                                                                     1260
gagaagtagc ttgaatattt cctacaatgt caacctcatt atgataatta agaaattcta
                                                                    1320
tgatggcatc tagtgaggta gagctgtctt ttgaaacttc agaacttctt cgatgaactt
                                                                    1380
gtgcaccaaa ttgtttggcc acattctcaa tttcatcatg gtctgtcgaa acccatacac
                                                                    1440
tetggaagge ceetgaatee agggeegeae geaggaeeca gecaatgage gggaeeceeg
                                                                    1500
ccaggtgctt aatgttcttc agggggatgc ctttgctgcc tccccgggcc agaattaggg
                                                                    1560
ctgccaggtg cgggggcttc tccacacctc ggccctggcc gccgcgagag ttgcgctgca
                                                                    1620
gcttcggcgg ccggccccgg gacggtcgcc cccgcgggtt ggagacggag gtggcggccc
                                                                    1680
cettetecae egagtecate tteeteceae geettetece eagettetee acateeggga
                                                                    1740
gctagtccct caccacctca gctcggcgcc gccctcgtg ccaagcttgg cgtgtcgata
                                                                    1800
ttc
                                                                    1803
```

```
<210> 6356
<211> 1447
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1448)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (81)...(686)
<223> similar to gi435425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6356

```
ceggegeeec acageaagee egageegggg gegeaceage etetggeage eegegeeece
                                                                      60
egeegegatt gacatgatgt tteecacaaa geaggeatte gggeteeteg cacetgagee
                                                                      120
cagcaactca aattcaccac ctcggactcc tgcgaccgca ttcaaagacg aatttcagct
                                                                      180
actgcgagct ccagtaccac agccctccag ctcgaatgtg acaagttggc cagtgagaag
                                                                      240
tcagagatgc agcgtcacat atgtgatcgt actacgagat ggtcctacgg cttgaacatc
                                                                      300
caggattgca caaacaggct gagatcgtca aagggttgac cgggtatttg gtgcccagct
                                                                      360
cctgccctac ctttcccaag gagcaccagc agcaggtttt tgggggccat tgagagggcc
                                                                      420
aagcaggtca cegeteeetg agetgaaegt etateateet gacageaget ecaageeeca
                                                                      480
ccagctgtcc cagcttgcat gccctggggc ctgcccttgg accccattac ccgctggggc
                                                                      540
tgcaagtege ettegetgne eggengttea gegeaggeae eggeeteete tegetqteeq
                                                                     600
agctgggttc ccaggcccac ctctccaagg aagacaagaa cgggcacgat ggtgacaccc
                                                                     660
accagggagg atgatgggcg agaagttcgg atttagcagg gggccgggac agggaggttg
                                                                     720
ggaggggga cagaggggag acagaggcac ggagagaaag gaatgtttag cacaagacac
                                                                     780
ageggagete gggattgget aaacteecat agtatttatg gtggeegeeg gegggggee
                                                                     840
cageceaget tgeaggeeac etetagettt etteetacee catteeegge tteeeteete
                                                                     900
ctcccctgca gcctggttag gtggatacct gccctgacat gtgaggcaag ctaaggcctg
                                                                     960
gagggtcaga tgggagacca ggtcccaagg gagcaagacc tcqcqaaqcq caqcaqccc
                                                                    1020
ggcccttccc ccgttttgaa catgtgtaac cgacagtctg cctgggccac agccctctca
                                                                    1080
ccctggtact gcatgcacgc aatgctagct gcccctttcc cgtcctgggc accccgagtc
                                                                    1140
tecceegace eegggteeca ggtatgetee cacetecace tgeceeacte accaectetg
                                                                    1200
ctagttccag acacctccac gcccacctgg tcctctccca tcgcccacaa aaggggggc
                                                                    1260
acgagggacg agcttagctg agctgggagg agcagggtga gggtgggcga cccaggattc
                                                                    1320
cccctcccct tcccaaataa agatgagggt actaaagttg tcttggtttt taattttatt
                                                                    1380
attatttttt tctttttcca gtatactagc ttgtcttttt aaggaaaggg ggatattaaa
                                                                    1440
aaaaaaa
                                                                    1447
```

```
<210> 6357
<211> 1010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1011)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (743)...(39)
<223> similar to gi1575505 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6357

ttttttgttc cccttctaca taaaaacctc agtcacccac tcctgagtgg agatgggcag 60
aggctctggc ccctgctcct ctggcttctc agcagcgtgc tttcttattg ctgcagcaag 120
gcttgaagag atgtgtgtca atgaggactt ccccaaaacg gcctttatag atcgatccca 180
caacatatct tctgtctttt ccagtaagtg gagatctaaa aagggaaaaa ctgggtggtt 240
ccggttagaa ccngagaagc ccaccctgt atctgagccc gtccatctga actggttaac 300
tgtaaacaag ggggattgag ctgggggagg cactttgagg tggtactgtg agcatcagaa 360
ttatgaccgt ttaaattcct tctgcagttt actgatctgg gtgcctttta atcctgttcc 420
```

```
cagataagag ttttcacttt ctttggtttc aatgtagtct ttagaactgg gtccagccct
                                                                     480
tgcatctacc acatgattcc agttttttt ttgatcctgc tggcaacttc ttccatcttt
                                                                     540
tcaaaaagca ggacaccagg cattgccaga tgtctcctga aacgagtctc atgcaatcca
                                                                     600
aaacagctct tggaagtcct ttttcatagc gtttactgtc agtgaatcgg agaactggag
                                                                     660
gacttagete etgaaatace ageaceete tataettegg tacatetttg gettgtgaaa
                                                                     720
accaaacatc tttttctttc tgggcaatag taggcctggt ctgaagtctt aggtcaaatt
                                                                     780
agctgtccac tcagatgttg tcaacttctc gtcctggttt caggggttga aggctgtttg
                                                                     840
gtgaatcaga gacagggatc tttggtggga gtcatggtcc attcaggaag ttgtgccttc
                                                                     900
caaaagcaag ccgttccacg cgcaataatg tccccgaggt gcggagtgca cgccaggcca
                                                                     960
gtccccctca agcgctccct cctcatcgac tgccttgtct agaaagatag
                                                                    1010
```

```
<210> 6358
<211> 3579
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (482)...(3103)
<223> similar to gi5757884 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6358 gcaagatggc ggcggcgtgg cgctgagagg cgcggggcc cctgcaggta gtggcgcgag 60 ccggctccgc gaccagcggg cccggagact ctgggctgcg ggtgggaact ggagcgcaga 120 gtccgcggcc ggcacgggaa aggagaagac agactgctgc tttggacctg ttggtaatga 180 tggcctgagc taaacatcta actagaaggg atacccttcc atttcaaaga acagaatgct 240 aaggaagctg tggcaagtga ttggagttgt gcttcaaaaa tttcagaaat tcagcagtat 300 tttatctgcc aacaataagc tctttacttg attgcaccat gagaaagctg ctaatgagac 360 ttgttgagca caaaaatgga cttgaagaac caaaagccat tgttttcaaa tgaagaacac 420 tgaacagttt taagcctcga tgctttttaa tcaccactga gcttttcctc ataacatcag 480 aatggcaagc aggcgaaaat caacaacacc ttgcatggtc cttgccagtg aacaagatcc 540 agaccttgag ttgatatcag atttggatga aggtcctcct gtgcttacac ctgtagaaaa 600 caccagagca gagagtatct caagtgatga agaggttcat gaatctgtgg attcagacaa 660 tcagcaaaat aaaaaagttg aaggtggata tgaatgtaaa tattgtactt ttcaaactcc 720 agatctaaat atgtttactt ttcatgtgga ttcggaacat cccaatgtag tgctaaattc 780 atcctatgtt tgtgtcgaat gcaattttct taccaaaagg tatgatgcac tttctgagca 840 taatctgaaa tatcacccag gagaagagaa ttttaagttg actatggtga aacgtaataa 900 ccagacaatc tttgaacaaa caataaatga tctgactttt gatggtagtt ttgttaaaga 960 ggagaatgca gagcaagcag aatctacaga agtttcttct tcgggaatat ctatcagtaa 1020 aactcctatc atgaaaatga tgaaaaataa agtggaaaat aaacggattg cagttcatca 1080 taactcagtt gaggacgttc ctgaagagaa agagaatgaa atcaaaccag accgtgaaga 1140 aattgtagaa aatccaagtt cttcagcttc tgaatctaat acaagtactt ccattgtaaa 1200 cagaatacat ccaagtactg ccagcacggt agtgacacca gcagcagttc ttcctggatt 1260 ggcacaggtg ataactgctg tatctgctca gcagaattct aatttgattc ccaaagtctt 1320 aatccctgtt aatagcattc ccacctacaa tgctgcattg gataacaatc cccttttact 1380 taacacctac aacaagttcc cttacccaac aatgtcagaa attacagttc tttctgctca 1440 agcaaaatat acagaggaac agatcaagat atggttttca gcccaacgtt taaaacatgg 1500 tgttagttgg actcccgagg aagtagagga ggcaagaagg aaacaattca atggaacagt 1560 gcatactgta cctcagacca taactgttat tcctacacac atttccacag ggagtaatgg 1620

```
tttaccatct attttacaga catgccaaat agttggtcag cctggtctgg tccttactca
                                                                     1680
agtggctgga acaaacacct tgccagttac agcacctata gccttgacag tggcaggcgt
                                                                     1740
tecaagteaa aataatatae agaaaagtea ggtaeetget geteageeta etgeagaaae
                                                                     1800
aaagccagca acagcagcag ttccaacttc tcaaagtgtc aaacatgaaa ctgcattggt
                                                                     1860
aaaccctgat tcatttggca ttcgggcaaa aaagacaaaa gagcaactgg cagaattaaa
                                                                     1920
agttagetae ettaaaaate agttteeeca tgatteagaa attateagae ttatgaaaat
                                                                     1980
aacaggcctg acgaaaggag agattaaaaa atggtttagt gacacaaqqt acaaccaqaq
                                                                     2040
aaattcaaag agtaatcagt gcttacatct caacaatgat tcctctacca ccattattat
                                                                     2100
agactccagt gatgaaacca cggaatcccc aactgttggt actgcacagc ctaagcaatc
                                                                     2160
ctggaatcct tttcctgact ttactcccca aaagtttaaa gagaaaactg cagagcagct
                                                                     2220
tcgtgtcctt caggcaagtt ttctcaacag ctctgtactt acagatgaag aattaaatag
                                                                     2280
gttaagggca caaaccaaac ttaccagaag agaaatcgat gcttggttta cagagaagaa
                                                                     2340
gaaatcaaaa gctttaaagg aagagaaaat ggaaatagat gaaagtaatg caggtagttc
                                                                     2400
caaagaagaa gctggagaaa cttctcctgc agatgaatct ggtgcaccta agtcagggag
                                                                     2460
tacaggcaag atatgtaaaa aaacacctga gcagctgcac atgcttaaga gtgcatttgt
                                                                     2520
ccggacacag tggccatcac cagaagagta tgacaagttg gccaaagaaa gcgggcttgc
                                                                     2580
tagaacagac atagttagtt ggtttgggga cacccgttat gcttggaaga atggaaactt
                                                                     2640
gaaatggtac tactactatc agagcgccaa ttcaagtagt atgaatggtc tgtcttccct
                                                                     2700
taggaaaaga gggagaggga gacccaaagg acggggaaga ggaagaccgc gtgggcggcc
                                                                     2760
tagaggaagc aaaagaatta acaactggga caggggacca tcactcataa aatttaaaac
                                                                     2820
tggaactgca atacttaagg attattacct gaagcacaag tttcttaatg agcaagacct
                                                                     2880
tgatgaactt gttaacaaat cacatatggg ctatgagcag gtcagagagt ggtttgcaga
                                                                     2940
aagacagaga agatcagaat taggtataga attatttgag gaaaatgagg aggaagatga
                                                                     3000
agttattgat gaccaggaag aggatgaaga agaaacagat gatagtgaca cttggggaac
                                                                     3060
ctccaccgac atgtgaaacg gaagctgtct aaatcagatg actgaaatct gcctaaaacg
                                                                     3120
ttgaaggaga atcaattctt caactcaaga tgtctgattt actgtgaatt tgcccaatct
                                                                    3180
ttgatgacat tgaaaacgtt ttggggcata cacactcaaa aagcaggatc caatacccaa
                                                                    3240
aagaaatgga acttaatgtt gtgccaaagt taaactactg cagttggtgg aagttctgca
                                                                     3300
atgtaaatag aacactaatt aaaaaacaac ttgtaaaaat gcaatttaaa ttttaataca
                                                                     3360
gtacattttt cttctaatat gatggagaca ttctgaatct tagactttct gagggggttt
                                                                    3420
aatgaccact agagettgte etcatattea gtecagttta atactgtatg tetagtaaga
                                                                    3480
tgggctatat attgcctcta ttctttgaga tgtgattaag cttagaactt tgaccaaaaa
                                                                    3540
ttttacagta aaaattgtta aaaatgggta aaaaaaaaa
                                                                    3579
```

```
<210> 6359
<211> 2061
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (175)...(1845)
<223> similar to gi5813799 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6359

tttcgtgccg gtccagagct gtggggtggc ctccgcgcgg tctctggcgg agtcggggaa 60

tcggatcaag gcgagaggat ccggcaggga aggagcttcg gggccggggg ttgggccgca 120
catttacgtg cgcgaagcgg agtggaccgg gagctggtga cgatggcggg gccgcagccc ctggcgctgc aactggaaca gttgttgaac ccgcgaccaa gcgaggcgga ccctgaagcg 240
```

```
gaccccgagg aagccactgc tgccagggtg attgacaggt ttgatgaagg ggaagatggg
                                                                      300
gaaggtgatt tectagtagt gggtageatt agaaaactgg catcageete cetettggae
                                                                      360
acggacaaaa ggtattgcgg caaaaccacc tctagaaaag catggaatga agaccattgg
                                                                      420
gagcagactc tccaggatcg tctgatgagg aaatatctga tgaggaaggg tctggagatg
                                                                      480
aagattcaga gggactgggt ctggaggaat atgatgagga cgacctgggt gctgctgagg
                                                                      540
aacaggagtg tggtgatcac agggagagca agaagagcag aagccactct gcaaaaacac
                                                                      600
cgggcttcag tgtccagagt atcagtgact ttgagaaatt taccaaggga atggatgacc
                                                                      660
ttgggagcag tgaggaggag gaagacgaag agagtggcat ggaagaaggg gatgacgcgg
                                                                      720
aagactccca aggcgagagt gaggaagaca gggctggaga tagaaacagt gaggatgatg
                                                                      780
gtgtggtgat gaccttctct agtgtcaaag tttctgagga agtggagaaa ggaagagccg
                                                                      840
tgaagaacca gatagcactg tgggaccagc tcttggaagg aaggatcaaa ctacaaaaag
                                                                      900
ctctgttgac caccaaccag cttcctcaac cagatgtttt cccattgttc aaggacaaag
                                                                      960
gtggcccaga attttccagt gccctgaaaa atagtcacaa ggcacttaaa gcattgttga
                                                                     1020
ggtcattggt aggtcttcag gaagagttgc ttttccagta cccagacact agatatctag
                                                                     1080
tagatgggac aaagcccaat gcgggaagtg aggagatttc tagtgaagat gatgagctgg
                                                                     1140
tagaagagaa gaagcagcaa cgaagaaggg tccctgcaaa gaggaagctg gagatggagg
                                                                     1200
actateceag etteatggea aagegetttg eegaetttae agtetacagg aacegeacae
                                                                     1260
ttcagaaatg gcacgataag accaaactgg cttctggaaa actggggaag ggttttggtg
                                                                     1320
cctttgaacg ctcaatcttg actcagatcg accatattct gatggacaaa gagagattac
                                                                     1380
ttcgaaggac acagaccaag cgctctgtct atcgagttct tggcaaacct gagccagcag
                                                                     1440
ctcagcctgt cccagagagt ttgccagggg aaccggagat ccttcctcaa gcccctgcta
                                                                     1500
atgctcatct gaaggacttg gatgaagaaa tctttgatga tgatgacttt taccaccagc
                                                                     1560
teettegaga aeteatagaa eggaagaeea geteettgga teecaaegat eaggtggeea
                                                                     1620
tgggaaggca gtggcttgca atccagaagt tacgaagcaa aatccacaaa aaagtagata
                                                                     1680
ggaaagccag caaaggcagg aaacttcggt ttcatgtcct tagcaagcta ctgagtttca
                                                                     1740
tggcacctat tgaccatact acaatgaatg atgatgccag gacagaactg taccgctctc
                                                                     1800
tttttggcca gctccaccct cccgacgaag gccacgggga ttgacatcgc ccacctccga
                                                                     1860
cacccagtgg gcgccttggc tggtgcggct gctggtccag atggaggaaa ccagtgactt
                                                                     1920
tatggggctg agctagtagg gaagcccctg gaaagatgct gcgttccgaa cctgtgccta
                                                                     1980
atacacgcaa gggcgctgtc ccgcccaacc ccgcctttaa acgccacaaa taaagagcat
                                                                     2040
tgttaccgcc caaaaaaaa a
                                                                     2061
```

```
<210> 6360
<211> 1860
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (181)...(1575)
<223> similar to gi3098311 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6360
tttcgtggcg gtgcactgcg ccgcaccgt caataggtgg accccctccc ggagataaaa 60
ccgccggcgc cggcgccgcc agtccctctg gctgagacct cggctccgga atcactgcag 120
ccccccctcgc cctgagccag agcaccccgg gtcccgccag cccctcacac tcccagcaaa 180
atgggcaagg agaagacca catcaacatc gtggtcatcg gccacgtgga ctccggaaag 240
tccaccacca cgggccacct catctacaaa tgcggaggta ttgacaaaag gaccattgag 300
aagttcgaga aggaggcggc tgagatggg aagggatcct tcaagtatgc ctgggtgctg 360
```

```
gacaagctga aggcggagcg tgagcgcggc atcaccatcg acatctccct ctqgaagttc
                                                                      420
gagaccacca agtactacat caccatcatc gatgcccccg gccaccgcga cttcatcaag
                                                                      480
aacatgatca cgggtacatc ccaggcggac tgcgcagtgc tgatcgtggc ggcgggcgtg
                                                                      540
ggcgagttcg aggcgggcat ctccaagaat gggcagacgc gggagcatgc cctgctggcc
                                                                      600
tacacgetgg gtgtgaagea geteategtg ggegtgaaca aaatggaete cacaqaqeea
                                                                      660
gectacageg agaagegeta egaegagate gteaaggaag teagegeeta cateaagaag
                                                                      720
ateggetaca acceggecae egtgeeettt gtgeeeatet eeggetggea eggegaeaae
                                                                      780
atgctggagc cctccccaa catgccgtgg ttcaagggct ggaaggtgga gcgtaaggag
                                                                      840
ggcaacgcaa gcggcgtgtc cctgctggag gccctggaca ccatcctgcc ccccacgcgc
                                                                      900
eccaeggaea ageceetgeg eetgeegetg eaggaeggtg tacaagattt ggeggeattg
                                                                      960
gcacggtgcc cgtgggccgg gtggagaccg gcatcctgcg gccgggcatg gtggtgacct
                                                                     1020
ttgcgccagt gaacatcacc actgaggtga agtcagtgga gatgcaccac gaggctctga
                                                                     1080
gcgaagetet gcccggcgac aacgtcgget tcaatgtgaa gaacgtgtcg gtgaaggaca
                                                                     1140
tccggcgggg caacgtgtgt ggggacagca agtctgaccc gccgcaggag gctgctcagt
                                                                     1200
tcacctccca ggtcatcatc ctgaaccacc cggggcagat tagcgccggc tactccccgg
                                                                     1260
tcatcgactg ccacacagcc cacatcgcct gcaagtttgc ggagctgaag gagaagattg
                                                                     1320
accggcgctc tggcaagaag ctggaggaca accccaagtc cccgaagtct ggagacgcgg
                                                                     1380
ccatcgtgga gatggtgccg ggaaagccca tgtgtgtgga gagcttctcc cagtacccgc
                                                                     1440
ctctcggccg cttcgccgtg cgcgacatga ggcagacggt ggccgtaggc gtcatcaaga
                                                                     1500
acgtggaaaa gaagagcggc ggcgccggca aggtcaccaa gtcggcgcag aaggcgcaga
                                                                     1560
aggcgggcaa gtgaagcgcg ggcgcccgcg gcgccgaccc tccccggcgg cgccgcgctc
                                                                     1620
cgaacceegg ceeggeeece geaccgeece egeggegege geegeteegg egeecegeae
                                                                     1680
ccccgccagg cgcatgtctg cacctccgct ttccagaggc cctcggtcag cgactggatg
                                                                     1740
ctcgccatca aggtccagtg gaagttcttc aagaggaaag gcgcccccgc cccaggcttc
                                                                     1800
cgcgcccagc gctcgccacg ctcagtgccc gttttaccaa taaactgagc gaccccaaaa
                                                                     1860
```

```
<210> 6361
<211> 975
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (124)...(645)
<223> similar to gi829623 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6361
gtccagtgtg gtggaattcc gccgccactg tccggccaca gcctaacgct cttcgctgtc
                                                                       60
gtttgcggtc tcgcgcaggg cggccccggt tctggtgttt ggcgtcggaa ttaaacaacc
                                                                      120
accatgtcga gcaaaaaggc aaagaccaag accaccaaga agcgccctca gcgtgcaaca
                                                                      180
tccaatgtgt ttgccatgtt tgaccagtca cagattcagg agttcaaaga ggccttcaac
                                                                      240
atgattgatc agaacagaga tggcttcatc gacaaggaag atttgcatga tatgcttgct
                                                                      300
tctctaggga agaatcccac tgatgcatac cttgatgcca tgatgaatga ggccccaggg
                                                                      360
cccatcaatt tcaccatgtt cctgaccatg tttggtgaga agttaaatgg cacagatcct
                                                                      420
gaagatgtca tcagaaacgc ctttgctctt gctttgatga agaagcaaca ggcaccattc
                                                                      480
aggaagatta cctaagagag ctgctgacaa ccatggggga tcggtttaca gatgaggaag
                                                                     540
tggatgagct gtacagagaa gcacctattg acaaaaaggg gaatttcaat tacatcgagt
                                                                      600
tcacacgcat cctgaaacat ggagccaaag acaaagatga ctgaaagaac tttagctaaa
                                                                     660
atcttccagt tacattgtct tactctctt tacttctcag acacttcccc caccctcata
                                                                     720
```

```
gaacctgttg catgcaactt agtttcacag ctttgcctct tctttttgat gtatttattc 780 cagacctttc tgccacttta gcacttggta taatcagact gggaaatggg ggatgagggt 840 ggtaaattgt attgaaaaag atcgcgaata aaaatcaaca aagtgtgaaa gcccagaaaa 900 attttgctgg ttttgctggg atttttacat ttttatataa taaaaatgtt 960 attttgaaaa aaaaa 975
```

```
<210> 6362
<211> 3684
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2886)...(1919)
<223> similar to gi1480243 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6362 ttttttttt ttgaaaaaac ggggtttata tgatgtttta aatctgcaaa taggtcgtta 60 cacaaaagtt ttttttgct tttaaataaa tttcacacat aagaaagaga aatatgaaag 120 cgacggtagt gaccagccaa gaggaataat aattacattc atcttaatgt gtgtgtgccc 180 agttcctgtt tacattaaca ttgggaaaac tccagacctg gtaatccagg aaccccaaat 240 ttgtgagtgg aaagttttta aaagggcacg tggaagtcaa agggtttctc ttttttttt 300 tttccccttt tagaagctat acataaaaag ttgttttcct tctgtactgt cacagaactt 360 ttacatacat tctcagtcct agttgtgaaa ggcctaaaga gaaagaaact caatttgcag 420 tccaacacaa aggggggaat ttctaaaata aataatccaa cagttttttg catttttta 480 aattaatttt tcatttttt aaaataaaat aaccaaaaaa gtgtaaagtt acaaaaaatg 540 tcgttgaaga ataatatatt aaaactgtgg aaaaaaagga aaaagacacg tcacaaaatt 600 ttaagattaa tatgaagatc ataatttaac ataaaagaat atattctatg gatttgtcat 660 cccgataaat atgaacaaaa ttaacaaaaa aaagcatagt ttggcaataa atacgttttg 720 ataagttaaa taagcttttt tatattgatg tgcagtgaca agcaaaattt ttgctctcca 780 atttctgaaa gttatatgaa gtttaaaacc cagggaagaa agcatggcgt gagtgctcta 840 aggatagacc tacggtattc tagagcaaaa accattaaag ctacttctac aggaaatcgt 900 tttacacaga tattgtatgt ggaatgaata ccattaactg ctcacccctt acttttttt 960 tttttagctt ttctctcatt tttttttttg ttgttatttt ttttaaaaag atgtcacata 1020 tgaactgggg aactttagca ccaaaatcaa gtctctccta gtccatctag cttccccttc 1080 ctccccactt aaaaaaaaga aaaaattaaa atcacaaagt cccgacttaa gtcaaaatct 1140 tcgtccgctt tttcagcctt ccttcctgca gacctacaca aacccaggca agattagtca 1200 acaggggttc agatcgggaa gaaaaaggtt ttgaatgtca agacaggttt cccccaaaac 1260 ccctggtctg ggcaacaact cttccaaggg gcaggggtgg gggggtggg ggggctggta 1320 cagggtggag aggtgccacc ggggaagacg gggaggagga ataagtgtgc gggagacttg 1380 aaatgaggga aggtgcagtt gtgtcgccag tggaggggc tgctggttcc gggtctccac 1440 cccgccatgg gcagaggctc cggggaggcc cacgggtgcc ctctggcgct gaagaaggta 1500 atgtagtcac agtgacaaag ttagattaca aggcactaag ttgcttctgt aaactgttaa 1560 ctgctttttc ctcttgtgaa tttggcactt aaagccttaa gcccggaaaa aaaaaggcat 1620 ctactgacaa aatatgggac ttgtctgtta tgccatggta agtgggctat aaaatcccag 1680 ggagggggtt tcaagcccag aagaagctac tgacaaattg acttgtcctt atgttaggtg 1740 gggttatgag ggggagaggg agggcacatt ctgaggtgct gggggaaagg ggttgagcct 1800 taaccttgtt aatgtagggc ctgtggggaa tgggatgggt agggagaaga gggtatgggg 1860 atgtggggtg cagggtaggg gtctggagta ggcaggaggt ccctccctac cctggcttag 1920

```
tcatctgaga tggaaagtct gctgaagatg ggcaggcgtc ttgagttgtc caaqqtcqqq
                                                                     1980
gagtetgage caetgtgget getgetggag etgeteaggt ageceteetg gteegagaga
                                                                     2040
gaatcctgag ggctgggggg agagtcaaac atgtgagggg actcggacat gggccggaag
                                                                     2100
aggaaggtgg tcggggagcc accccgggc agccccatgc taggggcaaa gaggcttgcc
                                                                     2160
agctcctggc tggagaaggc aaaaggggtt attggtgcca tcgggcaggg taggtgagcc
                                                                     2220
caggaggtca tcggcgctca gaataggggg tggggtgatg gacgtggggc tgtccagcag
                                                                     2280
cccggtggca gcggcggtgg cagcggcact gggaaaccca gcaaagctaa agctatgctg
                                                                     2340
gaggegggga eggteagegg agaggteeeg ggeeeeggee agggeaegge getetteage
                                                                     2400
gttgtggatg aagtggcagc ggggcccgta ggggcaaaag ccgatggtgt ggaaggtgcg
                                                                     2460
gcacagetee gtettgtaet tggggtggeg ggteaggetg eggagetegt ggatgeegtg
                                                                     2520
tgcgaactgg cacttgtccc cgtacttaca ggcaccgttt tcctcaaagg ggcggcacag
                                                                     2580
ctccggtctt gtagcggctg gagttgacct ggccgccccc gggctgcttc tgggtgggca
                                                                     2640
geageegete geeecettee gagaaggage ggteteggaa geggetgtet egegagetea
                                                                     2700
gagcgggggc tggctcaccc ttgaggctgc tgaggagctg gttctggcgg aacttggagc
                                                                     2760
tgggcagggt gactgagtgc ctccgaggga agccccacc agcaggggtg cccactggct
                                                                     2820
ttctgggcaa caggtaaccc cctgcactgg gagcactata gttgagcatc ttgttaccct
                                                                     2880
ggagagagaa gagaaggatg gtaaggacag aggacatcca ccaggatgtc cactatgggc
                                                                    2940
agccccctac acaatcacaa acgcccgctc tttctcaaag aactcatctc tacctcggct
                                                                     3000
ctagcaaget ccettecete tetecetece ataggecatt cacetgggtt tattttggce
                                                                    3060
ccatgcgtaa gaaaccacaa gatccaaact gtgtgacaag caccctgctc catgctgact
                                                                    3120
cetgeaatge aacceccatg tectetgtee ceaaagetae caetttaaaq tteaactttt
                                                                    3180
ttactagtca aatagattct tcaactcaaa atatctcaca caacccagac ctctctagat
                                                                    3240
taccgcaccc gccccgccac cgcccgcgac aaaaacaggt aaacctcaga aaggagtcta
                                                                    3300
teataggeae gttaggteee ettecaatea gtetetgett aattgataee eeeteettea
                                                                    3360
agacctggcc taagactctc aacttcctcc ttcagaagtg ttcccttcct ttggcaacag
                                                                    3420
gttttcagac tgcctttgct ttttcttgtg gggaggagat tgggggcctg gtctgaggtt
                                                                    3480
gggggagaca gggatgtgat tcctgaaaat aaaactcttt gccctaagtt cccggaagag
                                                                    3540
atattttcta caataatctc tctcaccatt tccactcagc cctagcccac cccgcccct
                                                                    3600
tcactgagaa gatgcctttg caattagtct tttggctgca agagcaagct tggataagag
                                                                    3660
ctccagtgtt taatctttaa cgca
                                                                    3684
```

```
<210> 6363
<211> 3624
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3625)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3180)...(2728)
<223> similar to gi1439654 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 6363
ttttattttg gaattcagat tttttatttt tggctcttag gaagtagtca gcaaatactg 60
tataatccct agtagggaac catgtcataa aatatattga catttctgca acaaagaatc 120
```

```
acactaaaag gaacacatca taattaccca tagetteeta teagtgtaag tteagqteag
                                                                      180
gtttggtttc aaatgggtta tgaaaatact tttggttttc agagcattgg gactttggaa
                                                                      240
atgaggacct ggatcatcct ttattaggga gaaatagccc caggagccac gtctcagcaa
                                                                      300
ttccatggaa acacaggttt ctttgccttc aaaattccgt tcctaccttc tttgtcttcc
                                                                      360
ttcccccaaa gaaactggac aaaaaaggtc agaactgtat ttgttattca tacatttqcq
                                                                      420
ttgatttaaa tacattacgt acaatttcta cattggatta gaagaacgac acagggggca
                                                                      480
gcaacactct cgcagcccag cctccattcc ctgacactgg aggcagggcc tatggctggc
                                                                      540
agagggacgg tgttccatga gtgccaccca gaagcctccc ccggcattct gggcccctgg
                                                                      600
ctcttccaga gtccacattc aaggcaacct gagcacaggc ttgagggaga gtggagaaag
                                                                      660
gccaggaaag gatgcccaca ctcttgcctg ccaggcccag gaccagctct ctcctacact
                                                                      720
ggacccaatt tccttctgat cacagagctg gtctggatca agacaatgtg gagatctggt
                                                                      780
gtggaggctg tggccaggtg aggcagccgg gctccctgtt agacccccag gctctcttga
                                                                      840
gcaccagatg ggcactttac caacaggttt gggtaaaaat gtctacagag agctatqcac
                                                                      900
acctgggtcc ccttctggct cctacagtca aggggcaagt gttctctcga acattgttcc
                                                                      960
caaggccagt gtccgagtca gctgcatgtg attgtcgggg ctgggattgg ggcaggcagg
                                                                     1020
cgagctgtac cttcgtccac agggcatgca catccagctc tcagaaattc ttcctgtcag
                                                                     1080
ccaggtggaa gcccgggaca agtggactct tggtggctgg actggaaggg gaccggcggg
                                                                     1140
gaccagcetg gaccagetga ccagaggget gcacatetet getetgcage egggcaagca
                                                                     1200
gaggacatgc agccatagtc ctcactccct ttctttggtt gtttttcaaa ccttcaagat
                                                                     1260
agttactttc tgaggttgac tgaccaatcg caaggtgcca gaattgtgaa atgtccagta
                                                                     1320
gcacagggca tgaacacagc tgcccctcca gacacagatg gcaccctttt tactccctcc
                                                                     1380
tgaggccgta ctttgctttg gtgtagaaat ggctcaaaca cctggcaagt gggggtgggg
                                                                     1440
agtgaggcag caggggaaaa gacacatgga agcaagaaga tacgcactga gctgcgcagg
                                                                     1500
acctgggaca gtttgaaggc ctctctctt tgggcctcac ctttctcagg gaagccatag
                                                                     1560
agaaatcggc ctaggacaag tcagagagaa aagggaaact gccacttatg aggcagaatc
                                                                     1620
cacgtcctgt tacttccacc aagcagcagc ggtagcacag aaaaaagtcc aagaacctaa
                                                                     1680
tagcctgtcc tcttggaagc caagactcat cccagagccc ttgcagagac ccactcccga
                                                                     1740
agacaaactg aactcttaca tcaaaagagt tggggggaaa aaatttaaaa cgagaggaac
                                                                     1800
aaatgagaag attgggacca aggactcagg aagcaaggtg ggatatgttc acccatagac
                                                                     1860
cacttagete eeggeataca eteeggetge gtggateaet tttacatget gggagteaae
                                                                     1920
ttcctattaa aatataaatg ctaagactag ctcttcctgc ctctgcttga gaaacagaca
                                                                     1980
agctgtaggc cagcagagag cagagaggtt ctctatgatt gtgtgcggaa gtgctggcgg
                                                                     2040
gggtaaagca aaaacctccc ttccaggaga actgtttcga ggcttgcagc cagcccacag
                                                                     2100
cactgatggg agatggagga ggcttggcaa aaacccaaaa gaaaggtgtg gcttctgtct
                                                                     2160
gtcccagtgc tgtggtactg cgagtcatcc agttgccctc tgacaccacc ttggctcatg
                                                                     2220
ggaggaagca actgcaaggc agctgaatgt caggtctatg caaatttagg cctggattaa
                                                                     2280
aggtttctga catgagatga cccggggttc tgctacaagc atttaaagtt gtttttgttt
                                                                     2340
tgtttgtttt tctgatgcag aatataatag ggaattgcaa tagagcaggg tttcagggaa
                                                                     2400
ggaagggact gtcccagcct gctaccagca gatgctggaa gggagatgtt ccttcccagg
                                                                     2460
catctggact acgtgcatgg agctccagcc tcccccacat cagaagggcg aggagcactc
                                                                     2520
actgttcctg attgtgcttc tccctgtggg tggaaagctc tgagcagggt ggcaagcaga
                                                                     2580
gagagagggc tettaaaggt getgetetee aceggettet etggetttte etgeacecea
                                                                     2640
ctccccagge ttcctcccac cagtetetga caatatttcc tetgeetgec tetggageta
                                                                     2700
ccaccatgaa aagaagggct tccggctctg aaagctctgt gtgtaggact cgctagaaga
                                                                     2760
ccgctggtgg gaacgggccg tctcgacaat cacaggtggc atctggacga ggtgcagggg
                                                                     2820
actettgttg tettteaagg eetgggteag atttaagate tgggeeeege atgaeageaa
                                                                     2880
tetgettatg gaactggeee etgtegaaac caggatettt ettgaagagt teatataggt
                                                                     2940
cctcttccaa gtccttgacg aagttagggt ccgatatctt tggaaggatc agatctttga
                                                                     3000
tctcctgaga aaatgggact ttcgcctggg gcaaccaggc ccagtaaaaa ggatatgccc
                                                                     3060
tccaggagtc aggatgcttc agtgggaagg ccagcccatt gtctatggca gccaccttga
                                                                     3120
taacaggete etteaceace acceagtetg tgteeegaga getagaacta tecattggae
                                                                     3180
agtcatattt aatcagccag ttgtcattgc ctcgatcagt gttgcggatg atgtaatcca
                                                                     3240
gcaccaacan ccgctcaaac tggagcagta gttgccggtt agtgttctca ggaagaggtt
                                                                     3300
ctgcttcaaa acgccgcagc caatagtctg catctttgta gccttcaaca aagagctgga
                                                                     3360
atgaaccaac ctttggtggt agccctatgc ggttaaaccg ctgtccaact tttgacactt
                                                                     3420
tctgtagtgc aagccgcttg cccctggact tcactcggtc aatggcgcta tagttgaagg
                                                                     3480
tctcgctggc caggtatagt acctttgtac gggaaacaat gttgagttcc agttattggt
                                                                     3540
```

```
<210> 6364
<211> 1956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (430)...(1504)
<223> similar to gi5262472 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6364 tttcgtaatt cagtcctttc actgcaacca aagagggtac aaactcatag aataatttag 60 gcttttaaga agcccttaaa atgtttaatg atgcctgtat taaagtgttt ttaaggacgt 120 gagttttgtc caatgtaata ttcaaccgtt ttgggagggg gggattctgt actttacaga 180 taattgaaag atccgccatg atcgtttaag cattgcgttc ttggtgttct ataaactccc 240 atgtagaatc tgttttttc ccataggttg tgcatttctg gctctcaaat agtcccagca 300 gcacteteag cetetgeeet gecaggeeet gatgacacag gggttgetga cetaacggca 360 cgttcatccc tggaagaaga ggtttaccat gtggatgtaa agattgagga gtatttcgct 420 tttgacagaa aagaggatga tgatgaatgt cttgaacaaa aaccagctca gcccggtagg 480 aaatggcgcg aactcggact tcctcctgtt tccccgcgtg actgtgtcaa agatgccgtg 540 gcagcagaag tgtttgatca cgtctggaca aatatggtag aacttttgga agagctgatt 600 agaaaacact gggaaactac actcacagaa gggaaaaaaac agagagaaac attgaaagtg 660 gctggaaaca gatttccgca cgtcctcgtt ccacgcgctc acgccgatgg agccagtggc 720 cccccgtccg gacacgccga ggctcacggc atctccctgg cttctcgtct gaacctgccc 780 cagattcatc acttctccag cagtttttat agtgacatga atggtgtcat gacaattcaa 840 gcaaaaccgc ttcagcggag acctgcctat tttgctgaca gaacgcagaa tgagaaggag 900 gacaaagcat cgggtggagg ggcaggtgct ctctcctccg caccgcacag actgggacgg 960 gcctcagaca ctcatggatt atcaccttct gcaaagaaaa caccagtgcc ctggaggctg 1020 cettetettg etteagatte acagagacta aaaacteeca acatetatag tgacgaagtt 1080 cttcggggaa caaaactgcc gactggcgtg gaccacatgg cttccccact ggttcaaacg 1140 tcacggagca ggttcccccc gctagtcacg gagaccaggg ggcagaatac agcagttcct 1200 ggatgccgcc ttgtttctta cagaggaagg catctacaaa accgtgtgtt gagtgccatg 1260 cctgacggta cagaacgatc gcgtcttcga gaaagaacag ccaccctgga acggttgtca 1320 aggeccagea caacccacae gtteeggeag teggataege etegaaaaag tteattgaca 1380 caaatggaat ttgctgctca cacatggaca ggtcaaagta ttttgacagg ttcacaatat 1440 gtgcctaaat gcttttcaga ggacaactct tgactttcaa gaggagattc ccaagtgaca 1500 tettgaaace acceetecea gaaceattgg ageacetgtg geeteggeae actgettate 1560 acttgaaaaa tggaggaaca agtgttatat ttatctgtgt gtctgacagt gtgagatgtt 1620 agaccgagag aaaagcaaac aaataaatca cttaatcttg aacactttgc actgtaaaga 1680 gagtgaaagt caaacccacc aagctgcctt gctgaaagca tctccaaggt tctgtaggct 1740 ttgttcagaa gcccctgatg tgtgtttgca gtccgtcatt ttatcaatga tacgcaaaca 1800 taattagcat gtgtatgtac tcacacacta attacatgta agaatatatt atctaggaat 1860 atgtcatttg taactttgta ctctgacgta ttttctagtc tcaccctatt agtaattctg 1920 tcaaaatcct agacgctagt aaatattagt atttga 1956

```
<210> 6365
<211> 2547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2270)...(381)
<223> similar to gi4379097 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6365 ttttttttt ttgtgagaaa gctctttact gggggtacag cgaggaggag caaggccatc 60 tececetace tgeececace eceteetagg gteetggggt gaggggggt etteceteca 120 ccggaccacc actgtctttg gtacaataaa tagaaaaaaa gggggagagg ggcccaaggg 180 tccagtcctt agtggggagg gagcggccaa aaccctctcc ttgacccccc tgccccaggc 240 cccaatcagt gcaggcctca cccaccccag ctgggtagca gcaattccag tcaaggagag 300 agatgaggat gggagcccag ggcccccaga tgggggaggg tatggcttca ggaggggccc 360 cagggagggg gcagggtcac gagctggctg ctgtgctctg gggtacacca cggaggccca 420 ggtgaggccc cagagtggca gggtcatcag gaggcgggag gggtggacga cctccagtca 480 tccgagtccg gagggctgag gcagccgggt gctgggggc aggcgctggg tgaggtgggg 540 agcagtcagc agggccgccc accaggctca catccatcag ctccgggggt ggtggtgagg 600 ttggtgatgg gggacgacca aggtatcggg gctggggggg taactgggcc ccggtcccag 660 gcagtgacga ggcagaggca ggggcttgat gtgtcttgtg gggcacatca cccctgccc 720 agggccgcag cggctgggag ggtgggacct gggggctgtt catctcacag tctgtgatag 780 ggggcccagg gcccccacaa tatcggttgc tgtagcggta ggtccggttg tcactggagg 840 agccactgga gcctccagaa ctggagatgg agctggcggt gctggaagag gggcaggtgt 900 cgaggggcgc gggcgaggtg gaggcactgc tgcctgccgg gcccgtgttg gtggcctcgt 960 cggccgtgcg gcggaagaag ccgtgctgca gagcccccag ggggctgatg cgggcggcgg 1020 geteatacte cageatgege ageaceaggt cetggaageg gaggtagteg geggggetgt 1080 1140 gcagccgccg tgtcccgggg ccctggtaat ccttcctgag ttctttcgtc cttcgtaggg 1200 tccagccacc cccaggcagc cgttcaaagt acttgcgagc cttgggcgcc tggtccagca 1260 tggcggccgg tgggatgccc agcacctcca caatgcggtt catctggtcg acctcattgg 1320 agccactgaa gaggggctct ccggtgtgca tctccacaag gatgcagccc agggaccaca 1380 tgtcaatggc caggtcgtag ggtgtgccca ggagcacctc aggtgagcgg tagaagcggc 1440 tctggatata ctggtagatc ctctggccaa gctggcagga gctgccgaag tccacaatct 1500 tgatggcgtt gcgcttgggg ttgcacagca agatgttttc gggcttgagg tcgcagtgaa 1560 tgatgctgag ctcaggcgtg gccagaaaga gcagtgccgt gcagagctgc tgcgccagct 1620 tccgggtcag gttcagcgag acgccgcgga agtgggtgtt gcgcaggagg tcgtacaggt 1680 tgtaggacag cagctcaaat accaagcaca agtgggttcc ggaacatgaa gtgccgcttc 1740 aggtgtacta tatagtactt catctccgtg tcatgctggt tcatcagctc cagcagccgc 1800 ageteaatet gggeetggtt caggaaagee tttttgttet tgatgatett gatggeeaca 1860 ageteetggg tetgatgate ataggettte accacetgge caaaggagee tttgccaatg 1920 agegagteaa tttegtageg etceageeag egetegeeac tgegeacgat gtagteatgg 1980 ttgtcgtcat cataaccatg gttcaggacc ttcttctcct tcttgttgct cgaatcctgg 2040 ggtggcgcct gctgggcccg ccgcttcttc ttcgcatagt atacctcatt gatgtgcttg 2100 taggtettga tgaggtecae agagagetta egeagegggg etgaggttge ateceggaag 2160 gccaggggca gcctccgagg cagtagccgc acatcaggca atacctgcgt gtgctcctgg 2220 ggccctggga agccagagaa gggaccatgg cccggtggga cggccatggt gggctcagag 2280 ggccgcaggg gagcgaggcc tggagcggga gcccggccgg ggggcgcctt cttgcatcct 2340

```
geacetegge tgecacegee getgagacet gaaggagegg geaaqqqqae teaaactqet
                                                                    2400
cggggagece gageteagae etgeceaetg getgagggta teeggeggae geggeaagee
                                                                    2460
agggccccga ttacccagta atgcaaccag caaaatggcg accacaacaa accggcccc
                                                                    2520
ccacgccctg gactccqccc ccatccc
                                                                    2547
```

```
<210> 6366
<211> 4423
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (72) ... (3218)
<223> similar to gi5499741 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

60

120

180

240

300

360

420

480

1740

<400> 6366 gecgagageg ggtggetgag eegggaeete gegtgattet eggaaeeega ggagaagegg cgtccggggc tatggctgtg actctggaca aagacgctta ttatcggcga gtgaagagac tgtacagcaa ttggcggaaa ggagaagatg agtatgccaa cgttgatgcc attgttgtat cagtgggtgt tgatgaagaa attgtttatg ccaaatcaac tgccttacag acatggctct ttggttatga actaactgat actatcatgg tcttttgtga tgacaaaatc atctttatgg ccagcaagaa aaaagtggag ttcttgaaac agattgccaa cactaagggc aatgagaatg ctaatggagc ccctgccatc acactgctaa tacgagaaaa gaatgaaagt aataagagta gctttgacaa aatgactgaa gccattaaag aaagcaagaa tggcaagaag attggagtgt

tcagcaaaga caaattccct ggagagttca tgaagagctg gaatgactgc ctcaacaaag 540 aaggetttga caaaatagat atcagtgcag ttgtggcata taccatcgct gtaaaggagg 600 atggggaget caacetaatg aagaaageag ceageateae ttetgaagte tteaacaaat 660 tetteaagga aagagteatg gaaatagttg atgeagatga gaaagttega cacagcaaac 720 tggctgagtc tgtggaaaag gccattgaag agaaaaaata ccttgctggg gcagaccctt 780 ctactgtgga aatgtgttac cctcctatca ttcagagtgg tggcaactat aatctcaagt 840 tcagtgtggt gagtgacaag aatcatatgc actttggggc tatcacttgt gccatgggta 900 ttcgcttcaa gtcttactgc tccaaccttg ttcgcacttt gatggttgat ccttctcaag 960 aagttcaaga aaattataac tttttgctcc agcttcaaga ggagctgctg aaggaattaa 1020 gacatggtgt gaagatatgt gacgtgtata acgctgtcat ggacgtggtt aaaaagcaga 1080

1140 cgtgaaggct ccctagtaat caatagcaaa aatcaataca aacttgaaga aaggaatggt 1200 tttcagcatc aatttaggat tctccagacc tgactaacaa ggaggggaaa aagccagaag 1260 agaaaaccta tgccctgttt cattggtgac acagtgcctg tggatgagga tggcccagct 1320 actgttctca cttctgtgag aaagaaagtg aagaatgtgg ggatgttcct aaagaatgaa 1380 gatgaggaag aagaggagga ggagaaagat gaggcagagg accttttggg aagaggttct 1440

1500 gcacatcaga aagaactagc ggctcaactc aatgaagaag caaagaggcg attgactgaa 1560 caaaagggag aacagcagat tcagaaagct cgcaagtcta atgtgtccta taaaaaccca 1620 tetetgatge etaaggaace geatattegg gaaatgaaga tetacatega taagaaatat 1680 gagactgtaa taatgcccgt gtttggcatt gcaacaccgt ttcacattgc cacaatcaag

aatataagta tgtccgtgga aggagattat acttacttgc gaatcaactt ttattgccca 1800 ggcagtgctc tgggcaggaa tgaaggcaac atctttccta accctgaagc gacttttgtc 1860 aaggaaatta cataccgagc atcaaatatt aaggcacccg gagaacagac agtaccagcc 1920 ttgaaccttc agaatgcttt ccgaattatt aaagaagtac agaaacgtta taaaactcga 1980

4986

```
gaagctgaag agaaagagaa ggagggcatt gtaaaacaag actcactggt gatcaatcta
                                                                     2040
aaccggagta atccgaaact gaaagatcta tacattcgcc caaatattgc ccaaaagagg
                                                                     2100
atgcaaggct cactggaggc ccatgtcaat ggcttccgct tcacatctgt tcgaggagac
                                                                     2160
aaagtggata ttttgtacaa taatattaag catgctttgt tccagccctg tgatggagaa
                                                                     2220
atgattattg tettgeactt teaceteaag aatgeeatea tgtttgggaa gaaqeggeae
                                                                     2280
acggatgtgc agttctacac agaagtggga gagataacca cggacttggg gaaacatcag
                                                                     2340
catatgcatg accgagatga cctctatgct gagcagatgg aacgagaaat gaggcacaaa
                                                                     2400
ctgaaaacag cctttaaaaa tttcattgag aaagtagagg ctctaactaa qqaqqaactq
                                                                     2460
gaatttgaag tgccttttag ggacttggga tttaacggag ctccctatag gagtacctgc
                                                                     2520
ctccttcagc ccactagtag tgcgctggta aatgctacgg aatggccacc ttttqtqqtq
                                                                     2580
acattggatg aggtagaget gatecaettt gagegggtee agttteaeet gaaqaaettt
                                                                     2640
gatatggtaa tcgtctacaa ggactacagc aagaaagtga ccatgatcaa cgccattcct
                                                                     2700
gtagcctctc ttgaccccat caaggaatgg ttgaattcct gcgacctgaa atacacagaa
                                                                     2760
ggagtacagt ccctcaactg gactaaaatc atgaagacca ttgttgatga ccctqaqqqc
                                                                     2820
ttcttcgaac aaggtggctg gtctttcctg gagcctgagg gtgaggggag tgatgctgaa
                                                                     2880
gaaggggatt cagagtctga aattgaagat gagactttta atccttcaga agatgactat
                                                                     2940
gaagaggaag aggaggacag tgatgaagat tattcatcag aagcagaaga qtcagactat
                                                                     3000
tctaaggagt cattgggtag tgaagaagag agtggaaagg attgggatga actggaggaa
                                                                     3060
gaagcccgaa aagcggaccg agaaagtcgt tacgaggaag aagaagaaca aagtcgaagt
                                                                     3120
atgageegga agaggaagge atetgtgeae agttegggee gtggetetaa eegtqqttee
                                                                     3180
agacacaget etgeaceee caagaaaaag aggaagtaac ttetgaactt tggeeetgag
                                                                     3240
ctccattctt cctccagcca acccctgaaa attttacatg acatagaaac tgtatttttc
                                                                     3300
ctttcgtttt catttgaagt tttgccattt gtgtttatgg gtttaggggg ccatttgtgt
                                                                     3360
ggaccaatct actcggggaa ttccaggccc accaggacac gtgccaatgg ccccattcag
                                                                     3420
atggcaaggg aggaggtgtt cttgaagaca ggaggaggct cccgctgtta ataaatattg
                                                                     3480
gttcattctt ctctcttcct gtcaccttct gccaagacat tgatggcttc tgacatctta
                                                                     3540
tttggtgtct caaagctgta tttccaagac agtggtacaa ggtgaccctt aattacccgt
                                                                     3600
atcatggttc ttgaccagca cattcaatcc tccaacctac cctactgcca tgaccttccg
                                                                     3660
cacateteta agttttatet ttgcaataet caaggttete ggaaatttge taatggttgt
                                                                     3720
gataaaccat acagcttgag ccagtgaggc agattgggct ggtgccttcg tctgagtttt
                                                                     3780
cctgctttcc tgcctcgtgc agattctgag gtatatctgc tgccttggaa gacataagaa
                                                                     3840
gcagtgatac tccctggctc ggttattttc tccatacaat gcacacatgg tacaatgata
                                                                     3900
gaaggcaaaa ttgccactgt cttcttttt ttctcatata tctaaggaag atatatcagg
                                                                     3960
ttgtgcctca tgtaccgctt ctagtgaaat gtagaggaag gctcaaagga gtcaacattt
                                                                     4020
agatctggaa gggacaagtc atgccttggg cctagaatac cctgatgaga aaagagaaga
                                                                     4080
ggaagggagg ccatatctac aacacagcct ctcggcactg ctgctcctta ttttaacttt
                                                                     4140
gtcttgcatt gtcctgtatt tatcacagtt tctgttgaac agcttttcaa gtatttgggg
                                                                    4200
agtttatett gecatectee cettetggtt etetgeacce acetgteeca etgeagttee
                                                                     4260
ttccgtgctc tgtgacttta agagaagaag gggggagggg tcccggattt tatgtttgtt
                                                                     4320
tgttttttct ccttagcagt aggacttgat attttcaatt ttggaagaac taaaagatga
                                                                    4380
ataaactggg ttttttttgt tgtttgtttt tgtaaaaaaa aaa
                                                                    4423
```

```
<210> 6367
<211> 1316
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1030)...(289)
<223> similar to gi471981 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6367
cettttttat atatatateg tatttataac tggttacacg ttggattcat aattaggcat
                                                                       60
caccagtagt agttggcaca gttttgttat ttaagctcag ggtcaagttc tgtttcattt
                                                                      120
tgtcgttcca aagtacaaaa agaaaaaaaa aaatcaaagg catttcatct ccatqqtqtt
                                                                      180
ttcttaaata cagtaatgtc ataggaaaca gtatgtacag atgagcagtg cctcctqacc
                                                                      240
cetectetgt etettggaga taggggetgg ggteegatgg agaegggtea atgeggeetg
                                                                      300
etgetggaet eegatgeetg eetettgegt gaaggggtgt ageegttgag acagecattg
                                                                      360
gtetgeeggt ttggagggee etecatteag gatgteeetg gatgtgetge aegatgaggt
                                                                      420
tgatgggcac ccggattatc tgcactctct agggatgatc acatcagcat acttcctttg
                                                                      480
gtggcaagca gaattcctca aagggcaggc ttgacgaaac gtaatgtact tgaggataaa
                                                                      540
atctgeteaa gateeetgee tetetegetg atgteettta atactetgeg tgagageegg
                                                                      600
gtgtccgcat ctgtatccac aaaaagcttc atctggaaca ggtctcgtac ctttcctggg
                                                                      660
agtagaaggc caggatccct tcaaagagca ccacgtctgc gggatagaca gtaactgtct
                                                                      720
cctccttccg ggaatgggag acaaagtcat acacggggat ctggactgtt ttcccttcaq
                                                                      780
tgatttcttt gagtgttttg agaatgagtt cattgtcaaa ggcatccggg tggtcaaagt
                                                                      840
tgaactggcc cttcagggct ttggccttct gctccgaggt aaggacacgg tagaagctat
                                                                      900
cctggctcag gatgaccacc tgcttctggc gatagtccac ctcattctgc cccaggagct
                                                                      960
gcacgatett agcacacag gaagaettge egetagetgt teeecegetg aegeetataa
                                                                     1020
ggaagggete geegeegttg ggetgetggt ggttetgeag ggtetgeteg etgteeeegg
                                                                     1080
ccatggttcg gccgcccctc ctcccgctgc ctgtgcgaac ggacgcacgc tccccgcccg
                                                                     1140
cgcccgcgtc ggactccctc cgctttccgc agccgacgct aggcgctgcc ggggctgacg
                                                                     1200
gacgtgtccg tcgcctgcga gccgctcgga gcccggtgac ggggctgggt ttcccgaagg
                                                                     1260
agccaagage etteettetg eeegeagegg etggteeggt ttacateeca ggeaga
                                                                     1316
     <210> 6368
     <211> 1470
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(1471)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1361)...(426)
     <223> similar to gi5911924 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 6368
tttttgtacg attttaatct acagagtaaa ttattttata tacattggaa ccagttaatg
                                                                       60
cccttagaca atgtatagtt gtttcataaa gcaggacaga caatgcagag ggaaacaggt
                                                                      120
gcccaaaagc acagtcacag aggcttcaga aggtctagat accactacaa atcaatgctg
                                                                      180
gagatcactt ctaaaacaat caacgttcaa gaggaatgct ttaatgtgga gaaaatacca
                                                                      240
```

300

360

cgccctccgt cccaccccca aacctccccc actttttat aaccttttca attcactatc

aaaagteetg getetteaga tataetttaa aetataaata aacaetgeat agttetettt

```
tgtttgtttt gtttttgtt ttttgaaaaa ttattgcagt acaattactc ctatttggaa
                                                                      420
tttagtaagg agcaaacagc acaggagtgt gggcggtccg aatgggtcca ggagctggcc
                                                                      480
gcaggagtgc cggaggaagc gcagaagtct ggaacagtgt tgctgctgga gcagttcgaa
                                                                      540
gactgaaggg ggaactcact gccactgctg ctgcggctgc tgcagctgct agaggatttg
                                                                      600
gtagaattcg tggagccaat ggctttgaag gttcttttga aaatactaat tttacccca
                                                                      660
gtggatgtgc tgtcttctgt agtttgttgt aaggactgta tttaggtttc gggggcttcc
                                                                      720
cagcagetet gtetttgtge ettetaetge taatgtgetg tttaagttge gttteegagt
                                                                      780
tgacgtgcac atcacagatt tcacagtgaa atgttttatt ttggaggcct gtgtttcctt
                                                                      840
tattaacagg teetttgeet tteacteetg ceetaggaaa ggetttgata gtgeeactte
                                                                      900
cattccgggc ttctaacatg gttttgtgct tagtaccact gttgtgcgcc tccagctgcg
                                                                      960
aggcagagtt gacagcaacc ttgcatagcg aacagtaaaa gaagccgttt tgcctttct
                                                                     1020
tecteggtet cagtagaagg acatgageta ttgccagtgg etgtegttgg getttttec
                                                                     1080
actitagagg tgatctcagt tgtcataaca ctgcttttgc ggatttccac agttgtcgtc
                                                                     1140
gttgatattg ctggtgtccc tgcagtaccg tctgttttgt cagagctggt attgatggta
                                                                     1200
ttggtagtga tggaggtgaa ggtagtcttt gcgctgtcct tggcagttac agatttctgc
                                                                     1260
ttatttttca tggcttccag tgctttgagc ttcttggcat gtttcgtgcc tttgtagtgg
                                                                    1320
gccgcagcct ggctatcaga attaaatctc aactggcaaa tgttgcatga tatqatttgc
                                                                    1380
tttcttcggt ggggaagagg aaccccgaat gtatggtttc tcgtgccgaa ttcctgcagc
                                                                    1440
gcggacgatt ntcaaanngn gnnggcccca
                                                                    1470
```

```
<210> 6369
<211> 4176
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3891)...(1000)

<223> similar to gi4240295 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6369 aaggtaagta taattttctg cttttattga aaatttatat atgactcagt attgtaataa 60 ataaacataa ccattttcac aaaaaatgac agtgctatgc taaagaagaa aatattaaat 120 gggggattta cttgtagtgg caagacagac tttttatcaa tacagaataa atattaacag 180 catttcgtga gccaatggtt gagacccaac aaaatgtagg gaatcaagca tgatgtaaga 240 aataattttc cagagaaaaa aggatggtgt attctcggat gataagactg tctttgtaaa 300 ctggggcata tcaattagtc ccatcctcac agctcacctt caaaccacag ggcttgtttc 360 tggctatgtt aaaaggaccc tcctctgagg aaaagcagag gagaggaact cccattatcc 420 ttacagtgaa acgcaaccac tgcagaaaaa ctcccactgg gtaaatagaa cacagtttaa 480 taagtagatt ggatatgatc taactataaa atttaggtaa cagagtaagt gttacatgtg 540 gcaggaccgg aaaaaaatca tgacattttt cttatcccct tgtacccctc ccactgtcat 600 tatgctatta ccaacaacaa caagaataat gtttcaaatt ttcctctcat caaaaaatga 660 gagaaaataa cgagggaagt gtttttgttc tttttcgaac agtttcttga acacctccaa 720 taccaatcac tcacaaggtg tctgtgcaaa tctatttcac aggatttcaa ggaaattgtt 780 aactcacaaa aaaatcctta aatgaagcta ttttggagtt ctgtatatta tttggaaagg 840 agggaggaaa agggtggtgg tggtaaagta gaggtaaagt agtacaatcc agccaaacaa 900 aatgttaaaa gttttaaatc aacaatgagt ctgacttttt ctggtttggg aagcaagact 960 ctaaaatgtt gggagagatt ctttctgatc tgatggctac tgaagaacac atttctcctc 1020 tttcttggcc atcttgcctt tgttttgctc cagagttcgc tccaaatgct catcttcttc 1080

```
tteggeetge tteteetgeg egteeaggte eetgaegage geategeget tgtteaeeag
                                                                     1140
ggccaccage teatetagea gaagetgtte gegtegette tgggeetegg tettetgeea
                                                                     1200
gtottcaatg gotagoattg cootcaatto coggitcago agotcataco gtoqttctaa
                                                                     1260
atcatgttct ttttccagaa gagagagctg attcattctc cttattaagg catttttctt
                                                                     1320
attaactaac ataaaccatt cctgcatcat agcttcttct tcttctgtgt tccttcctgt
                                                                     1380
gtccatgaga tagcgaaggc gcttctccac cagcgcgca cgggtgtcaa tttqcttttq
                                                                     1440
ctcattctct agtgctgcca attctcctac tacatactga ctgggagtct ttgaaccctt
                                                                     1500
tattaagcac ttcatcttct gatggcttcc tctgagtttc agttatcgct gccttctcct
                                                                     1560
cattlecttt ctttgtatct teetgtattg atetetgeet ttteatetet ggtetattet
                                                                     1620
caatatattg gctgaaagac tgaagttgag tttttctgac tgtagaatct ttgctgaaca
                                                                     1680
caacaggatt tctaaaacgt tctgttgttt tttgtaatcg ttcagtccgg agatcttctg
                                                                     1740
tgccactttt catgtcctgc tctgagctct cagttacagc tttctgggca gcactggagg
                                                                     1800
gtgaatttgc cacctgtggc tgaacttcta ggagcttctt cagcttcaag tccaccaact
                                                                     1860
tactgttttg ttcgggagta tcaaggtcat tttctaagtt agtaagttca tctccacctc
                                                                     1920
ctacaacaaa gccttcaggg atctcctcgt tagtatctat ctcaatatta tcattttcat
                                                                     1980
ctccagatgc ctttgacctt tctttcaact tttctgcagc cctttcacca tagctgggaa
                                                                     2040
gttctgacat cttccctcca gatcgagctt ctgctattag ctgacgagct ctctctcta
                                                                     2100
getgeegacg tegetettea tettgetgat caettagetg cetgttgeag aatggggegg
                                                                     2160
ctgtgttggt attgtgctta ttccccgcct ttaaggctgc atctcttctt gcttgctcaa
                                                                     2220
gcagaactct tgctctttcc ttaagttctt cttgtctaga taacaatcga tgctggacta
                                                                     2280
tttttgatga atgatetgea tgatttaaag tggttetate ageatetgga teagaeteeg
                                                                     2340
tctgcctcag ggaagcatgt tttttcttag caaggtctag atctctacta tatgagtatc
                                                                     2400
caagtttaga agtaggagat aaacttgttt ttttgatagg agattctgga tctgatctgc
                                                                     2460
attctaagga tctggaattc tctaattttt ctttctccaa gttactaccg atgtctagag
                                                                     2520
tttgaagett ttgttcatct gtctcctcac aaataaaggg tggagacata tccttcttct
                                                                     2580
tatcactaac atataagtca ctcaattcta aagtctcagc tttcaatagt ctctttttgc
                                                                     2640
ctaacaaaac ctgtgcttgg gttgaatctg tattggaaca tattccaggg tcatcagatc
                                                                     2700
ctgaagtcct tccagagctc tgctgagact tctggggttc tgtgtcactt ttagtcctgc
                                                                     2760
gacagtaagg ggaggctgtg cttggactaa ggtgatcatc aggagtttga tgctcacttt
                                                                     2820
ctgactctcc aaccccgcta tcatttacaa atacagagtc atcctgtgat aagaagtcta
                                                                     2880
etgeteeget gataggetgt tgtagtteag geteeegett cagateacta agetetgeat
                                                                     2940
agaatttttc ttgatcaaca gaactgtttg tatctgtttc atagtttcca actttatatg
                                                                     3000
tgcttttact gctgttttcc tctatctgaa cgacatttag ttcttggcca ctgaaatgtg
                                                                     3060
cccttatttg atagagataa gtcataacag tcagtttatc aggaattgct aataatacca
                                                                     3120
tatcagaagg ttccaataat cgggaaattc ctatgctggc aaatccatcg tatgcctttt
                                                                     3180
tgttgttctc tttaatatct tgaggattca gagacttgta gtcaattaaa tctggtctaa
                                                                     3240
agtggtgtaa tattgcacaa aaagataaac catttctcca cgatgtagta aaattggtga
                                                                     3300
tttttactcc tcggtagttc tttgtaactt ctttacacca tacaagcaaa gactgactag
                                                                     3360
catttggctt tcgccccaaa acaggacttg gtatagggct tggcttagga gaagtagaga
                                                                     3420
gatcttttcc tgcagaaact gtgttttcat ttaatactcc tgtttttggt gagaggactg
                                                                     3480
gtggagccgg ggcctttctt ttcactcgcc tttcagtttc tagttcttga acaggattta
                                                                     3540
ccaaattatt tggaggagga gttgatttag gttcataaaa aggatttgat tcatccaatt
                                                                     3600
cttcttcttc agttttagaa ctatcagcat agaggtactt gctcatatcc acaggtctta
                                                                     3660
tattttttt ttttgtagac tggggaggag aatcetttat ggtcacaaat gettetgget
                                                                     3720
catcgaatgg gttcaaatac tgtggagtct gcacctcttt aaagggatta tagctgttat
                                                                     3780
tataaaaaga gtcttctgtt tttctaggtg aagctgtttc agtgataggt tcttctgagt
                                                                     3840
caggatetee aaatggattt aattetgeag cateaggate ateaaatgga tttgaattea
                                                                     3900
cggtggccaa gtccttttct gcttcatcca aaaagttaag tttgttgata agctctgtaa
                                                                     3960
ttttagctgc cttttcttct tggttcactc tgttctcatc atcatcttca ttatcttctt
                                                                     4020
cgaagtcatc taaattggcc aatgtcagcc tggcttcata ctcatccaac taggccaacc
                                                                     4080
tttgcatgtc ttcatctgtg gcttttcctt ccctgtgaaa aatgcaagat aatgaaaact
                                                                     4140
gaagagcggc agatacaact tttttagata atggct
                                                                     4176
```

```
<210> 6370
<211> 1382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1212)...(593)
<223> similar to gi4929693 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6370 ttgaggtgtc ccccaggggc agcaatatct gagcacctgt ctcccacagc actcaagcat 60 caagcagteg tgcatcaagc atccagcagg cccgatcccc gcaggccact tgcccatctt 120 tgtccactca gttggataat cagaaactgg tgcctcagcc tcqtqtqccc ccqqtcatcq 180 tectggagaa ccaaggtete egetgggtee etaaggataa qaaettqtqa qtacceaet 240 ccctctacct cttcttagaa gcccaaggct cctgggtctc ctctgtcctt ggccctgccc 300 caagggtett tetetagace caatetetgt taagtetgtg tetggaceca etaettgetg 360 tttgacctcc atgggggtta ctatttcaga gtgatgtgga gggactggga agagtcacgg 420 cagatggtgg gagctctact ggaagatcgg gcccaccagc accttgtgga ctttgactgc 480 caccttgatg acatceggca ggactggacc aaccageggc tcaacactca aatcacccag 540 tgggttggtc ccactaatgg aaatggaaat gcctgagcca gggccagcgg ggcccggttc 600 caatagtggg accaacccac tgggtgtatt tgagtgttga gccgctggtt ggtccagtcc 660 tgccggatgt catcaaggtg gcagtcaaag tccacaaggt gctggtgggc ccgatcttcc 720 agtagagete ceaceatetg eegtgaetet teecagteee teeacateae taagttetta 780 teettaggga eccageggag acettggtte tecaggaega tgaceggggg cacaegagge 840 tgaggcacca gtttctgatt atccaacata ataaqtactq catcaqqqaa qaattctqca 900 attcgcccag caattttcaa ggccaggggc ccagggctct gatcgttcac agctgcattg 960 gcatggtagt aaccagccac caccagaccg gcctgtgctc cccacacatc cacctggttg 1020 agggcgacct ccaacatgac ggacagggcc aggtggctgt ggaaqaqqqq cacacaqtcq 1080 gtgaggcaca ggcattctcc agaccgcggc gctggcgcca aaaacagccc gttgactgcg 1140 gcgtgtgggt accgggcagc atgcaggcac atcttcacgt aggccagggc cgagatctcc 1200 acctececca tggegagega ggetteggtt eggegacaac getaactega etegeaggta 1260 gecegeegge teeeggegee etgggteeeg gagteegeee eeggeeeagt eeaggaggag 1320 gtcccgattg catccgagcc ccgccttccc gcgcccctag ctggcggccg cgactctgcg 1380 CC 1382

```
<210> 6371

<211> 1783

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1784)

<223> n = a,t,c or g

<220>

<221> misc_feature

<222> (20) (221) (221) (221) (222) (221) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (222) (2222) (2222) (2222) (2222) (2222) (2222) (2222) (2222) (2222) (2222) (2222) (2222)
```

```
<400> 6371
acttgacggc actgcgctgc acgaattcgg cacgagctgc agccctggtg cgacccggcc
                                                                       60
cgttgccgta gagatgggca gggctggatg gagtggggtg cggtgagctg agctgaccct
                                                                      120
gettegecae ggggaetgea gtgaeceegg ettgeeggea gggegggtaa eaggttgage
                                                                      180
cagggtgggg ctgctcaggg gcgtggagcc gaggccagga tttctctgaa gacccggcac
                                                                      240
aggetattee tttetgegae gageceattg etatggaaac caaagegtta ggeeageggg
                                                                      300
gattgagget gegggateat gaegggtete tetecegaag aacettgeet aaggetteee
                                                                      360
caageggeta etteetgage gaaceegeee accegeetga aggagagagt ttteeatgga
                                                                      420
cacageetag cagaaagaeg cageettegt gettegetga etgetgaeea etgaeecaee
                                                                      480
gccttgatga cagcaccctc gtgtgccttc ccagttcagt tccggcagcc ctcagtcagc
                                                                      540
ggcctctcgc agataaccaa aagcctgtat atcagcaatg gtgtggccgc caacaacaag
                                                                      600
ctcatgctgt ctagcaacca gatcaccatg gtcatcaatg tctcagtgga ggtagtgaac
                                                                      660
accttgtatg aggatatcca gtacatgcag gtacctgtgg ctgactcccc taactcacgt
                                                                      720
ctctgtgact tctttgaccc tattgctgac catatccaca gcgtggagat gaagcagggc
                                                                      780
cgctactttg ctgcactgtg ctgctggtgt gagccgctca gctgccctgt gcctcgccta
                                                                      840
cctcatgaag taccacgcca tgtccctgct ggacgcccac acgtggacca agtcatgccg
                                                                      900
gcccatcatc cgacccaaca gcggcttttg ggagcagctc atccactatg agttccaatt
                                                                      960
gtttggcaag aacactgtgc acatggtcag ttccccagtg ggaatgatcc ctgacatcta
                                                                     1020
tgagaaggaa gtccgtttga tgattccact gtgagccatc ccacgagccc ctgcattgga
                                                                     1080
gtcagaggta cagatctatt gttgatctta caccaagatc caaacttgaa cattctactt
                                                                     1140
ttgttgatac agaaaaaaac agatgatgcc ttttatgagc acaaaaaaga gttgctgtag
                                                                     1200
cttttaactt tataatccat tttttttaag attaaactaa ttgtgagatg gtgaagataa
                                                                     1260
attttctgcc ctgtgagtga cactggccag gggataggtt gaggcagatg gtgcccagaa
                                                                     1320
gaaagagggc agcacccatt gcacatggca ggcctggaat cctgcagccc tccccaaaaa
                                                                     1380
cagattgacc caggaatgaa tctgctacaa ttccacctca ttctttcaca cccagagcca
                                                                     1440
gagccttaag catcatggta cctcttgcgc ttcttacagt gagtgccaat ctactagata
                                                                     1500
aatggccttc aggcaggtgc tccaggaatc ctgggggggt cccagggcca cctctggttt
                                                                     1560
ccaccttcac tataagtggg cccagttctg gttttctaga ttgtacttat gcataagata
                                                                    1620
gttttttaaa aggaaaggca ttccactgtt gttaaatttt tttttngtct tttttttgg
                                                                    1680
aaactgttcc ntgcttntgt tcacccatcc ggggggnttg cagtagtgtt gatccagggg
                                                                    1740
ctcantgtag gccacaacnt tttnagggtt caagngatcc ctt
                                                                    1783
```

```
<210> 6372
<211> 4213
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (24)...(3177)
<223> similar to gi31438 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6372

```
caggacaggg aagagcgggc gctatgggga gccggacgcc agagtcccct ctccacgccg
                                                                       60
tgcagctgcg ctggggcccc cggcgccgac ccccgctcgt gccgctgctg ttgctgctcg
                                                                      120
tgccgccgcc acccagggtc gggggcttca acttagacgc ggaggcccca gcagtactct
                                                                      180
cggggccccc gggctccttc ttcggattct cagtggagtt ttaccggccg ggaacagacg
                                                                      240
gggtcagtgt gctggtggga gcacccaagg ctaataccag ccagccagga gtgctgcagg
                                                                      300
gtggtgctgt ctacctctgt ccttggggtg ccagccccac acagtgcacc cccattgaat
                                                                      360
ttgacagcaa aggetetegg eteetggagt eeteactgte eageteagag ggagaggage
                                                                      420
ctgtggagta caagtccttg cagtggttcg gggcaacagt tcgagcccat ggctcctcca
                                                                      480
tettggcatg egetecactg tacagetgge geacagagaa ggagecactg agegaeeeeg
                                                                      540
tgggcacctg ctacctctcc acagataact tcacccgaat tctggagtat gcaccctgcc
                                                                      600
gctcagattt cagctgggca gcaggacagg gttactgcca aggaggcttc agtgccgagt
                                                                      660
tcaccaagac tggccgtgtg gttttaggtg gaccaggaag ctatttctgg caaggccaga
                                                                      720
tectgtetge caeteaggag cagattgeag aatettatta eecegagtae etgateaace
                                                                      780
tggttcaggg gcagctgcag actcgccagg ccagttccat ctatgatgac agctacctag
                                                                      840
gatactctgt ggctgttggt gaattcagtg gtgatgacac agaagacttt gttgctggtg
                                                                      900
tgcccaaagg gaacctcact tacggctatg tcaccatcct taatggctca gacattcgat
                                                                      960
ccctctacaa cttctcaggg gaacagatgg cctcctactt tggctatgca gtggccgcca
                                                                     1020
cagacgtcaa tggggacggg ctggatgact tgctggtggg ggcacccctg ctcatggatc
                                                                     1080
ggacccctga cgggcggcct caggaggtgg gcagggtcta cgtctacctg cagcacccag
                                                                     1140
ccggcataga gcccacgccc acccttaccc tcactggcca tgatgagttt ggccgatttg
                                                                     1200
gcagctcctt gaccccctg ggggacctgg accaggatgg ctacaatgat gtggccatcg
                                                                     1260
gggctccctt tggtggggag acccagcagg gagtagtgtt tgtatttcct gggggcccag
                                                                     1320
gagggctggg ctctaagcct tcccaggttc tgcagcccct gtgggcagcc agccacacc
                                                                     1380
cagacttett tggetetgee ettegaggag geegagaeet ggatggeaat ggatateetg
                                                                     1440
atctgattgt ggggtccttt ggtgtggaca aggctgtggt atacaggggc cgccccatcg
                                                                     1500
tgtccgctag tgcctccctc accatcttcc ccgccatgtt caacccagag gagcggagct
                                                                     1560
gcagcttaga ggggaaccct gtggcctgca tcaaccttag cttctgcctc aatgcttctg
                                                                     1620
gaaaacacgt tgctgactcc attggtttca cagtggaact tcagctggac tggcagaagc
                                                                     1680
agaagggagg ggtacggcgg gcactgttcc tggcctccag gcaggcaacc ctgacccaga
                                                                     1740
ccctgctcat ccagaatggg gctcgagagg attgcagaga gatgaagatc tacctcagga
                                                                     1800
acgagtcaga atttcgagac aaactctcgc cgattcacat cgctctcaac ttctccttgg
                                                                     1860
acccccaage eccagtggae agecaeggee teaggecage cetacattat cagageaaga
                                                                     1920
gccggataga ggacaaggct cagatettgc tggactgtgg agaagacaac atctgtgtgc
                                                                     1980
ctgacctgca gctggaagtg tttggggagc agaaccatgt gtacctgggt gacaagaatg
                                                                     2040
ccctgaacct cactttccat gcccagaatg tgggtgaggg tggcgcctat gaggctgagc
                                                                     2100
ttcgggtcac cgccctcca gaggctgagt actcaggact cgtcagacac ccagggaact
                                                                     2160
tetecageet gagetgtgae taetttgeeg tgaaccagag eegeetgetg gtgtgtgaee
                                                                     2220
tgggcaaccc catgaaggca ggagccagtc tgtggggtgg ccttcggttt acagtccctc
                                                                     2280
atctccggga cactaagaaa accatccagt ttgacttcca gatcctcagc aagaatctca
                                                                     2340
acaactcgca aagcgacgtg gtttcctttc ggctctccgt ggaggctcag gcccaggtca
                                                                     2400
ccctgaacgg tgtctccaag cctgaggcag tgctattccc agtaagcgac tggcatcccc
                                                                     2460
gagaccagee teagaaggag gaggaeetgg gaeetgetgt ecaecatgte tatgagetea
                                                                     2520
tcaaccaagg ccccagetee attagecagg gtgtgctgga actcagetgt ccccaggete
                                                                     2580
tggaaggtca gcagctccta tatgtgacca gagttacggg actcaactgc accaccaatc
                                                                     2640
accccattaa cccaaagggc ctggagttgg atcccgaggg ttccctgcac caccagcaaa
                                                                     2700
aacgggaagc tecaageege agetetgett eetegggaee teagateetg aaatgeeegg
                                                                     2760
aggetgagtg tttcaggetg egetgtgage tegggeeeet geaccaacaa gagagecaaa
                                                                     2820
gtctgcagtt gcatttccga gtctgggcca agactttctt gcagcgggag caccagccat
                                                                     2880
ttagcctgca gtgtgaggct gtgtacaaag ccctgaagat gccctaccga atcctgcctc
                                                                     2940
ggcagctgcc ccaaaaagag cgtcaggtgg gggccacagc tgtgcaatgg accaaggcga
                                                                     3000
gaaggcagct atggcgtccc actgtggatc atcatcctga gccatcctgt ttggcctcct
                                                                     3060
gctcctaggt ctactcatct acatcctcta caagcttgga ttcttcaaac gctccctccc
                                                                     3120
atatggcacc gccatggaaa aagctcagct caagcctcca gccacctctg atgcctgagt
                                                                     3180
cctcccaatt tcagactccc attcctgaag aaccagtccc cccaccctca ttctactgaa
                                                                     3240
aaggaggggt ctgggtactt cttgaaggtg ctgacggcca gggagaagct cctctcccca
                                                                     3300
gcccagagac atacttgaag ggccagagcc aggggggtga ggagctgggg atccctcccc
                                                                     3360
cccatgcact gtgaaggacc cttgtttaca cataccctct tcatggatgg gggaactcag
                                                                     3420
```

```
atccagggac agaggcccca gcctccctga agcctttgca ttttggagag tttcctgaaa
                                                                     3480
caacttggaa agataactag gaaatccatt cacagttctt tgggccagac atgccacaag
                                                                     3540
gacttcctgt ccagctccaa cctgcaaaga tctgtcctca gccttgccaq agatccaaaa
                                                                     3600
gaagccccca gctaagaacc tggaacttgg ggagttaaga cctggcagct ctggacagcc
                                                                     3660
ccaccetggt gggccaacaa agaacactaa ctatgcatgg tgccccagga ccagetcagg
                                                                     3720
acagatgcca cacaaggata gatgctggcc cagggcccag agcccagctc caaggggaat
                                                                     3780
cagaactcaa atggggccag attccagcct ggggtctgga gttgatctgg aacccagact
                                                                    3840
cagacattgg cacctaatcc aggcagatcc aggactatat ttgggcctgc tccagacctg
                                                                     3900
atcctggagg cccagttcac cctgatttag gagaagccag gaatttccca ggaccctgaa
                                                                     3960
ggggccatga tggcaacaga tctggaacct cagcctggcc agacacaggc cctccctgtt
                                                                    4020
ccccagagaa aggggagccc actgtcctgg gcctgcagaa tttgggttct gcctgccagc
                                                                    4080
tgcactgatg ctgccctca tctctctgcc caacccttcc ctcaccttgg caccagacac
                                                                    4140
ccaggactta tttaaactct gttgcaagtg caataaatct gacccagtgc ccccactgac
                                                                    4200
cagaaaaaaa aaa
                                                                    4213
```

```
<210> 6373
<211> 3439
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (704)...(3283)
<223> similar to gi3132526 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 6373 ggcttatagg gctcgagcgg ccgcccgggc aggtatagaa ttcagcggcc gctgaattct 60 agggttttca ggagcccgag cgagggcgcc gcttttgcgt ccgggaggag ccaaccgtgg 120 cgcaggcggc gcggggaggc gtcccagagt ctcactctgc cgcccaggct ggactgcagt 180 gacacaatct cggctgactg caaccactgc ctccagggtt caagcgattc tcttgcctca 240 gcctcccaag tagctgggat tacagattga tgttcatgtt cctggcacta ctacaagatt 300 catactectg atgetactga caacgtgget tetecacagt caecaaacca gggatgetat 360 actggaette cetaetetea tetgetecag ceceetgace ttatagttge ceagetttee 420 tggcaattga ctttgcccat caatacacag gatttagcat ccagggaaga tgtcggagcc 480 tcagatgtta attttctaat tgagaatgtt ggcgctgtcc gaacctqqaq acaqqaaaac 540 aaaaagtcct ttctcctgat tcaccaaaaa ataaaatact gactaccatc actgtgatga 600 gattectata gteteaggaa etgaagtett taaacaacca gggaceetet geeetagaa 660 taagaacata ctagaagtcc cttctgctag gacaacgagg atcatgggag accacctgga 720 ccttctccta ggagtggtgc tcatggccgg tcctgtgttt ggaattcctt cctgctcctt 780 tgatggccga atagcctttt atcgtttctg caacctcacc caggtccccc aggtcctcaa 840 caccactgag aggeteetge tgagetteaa ctatateagg acagteactg etteateett 900 cccctttctg gaacagctgc agctgctgga gctcgggagc cagtataccc ccttgactat 960 tgacaaggag gccttcagaa acctgcccaa ccttagaatc ttggacctgg gaagtagtaa 1020 gatatacttc ttgcatccag atgcttttca gggactgttc catctgtttg aacttagact 1080 gtatttctgt ggtctctctg atgctgtatt gaaagatggt tatttcagaa atttaaaggc 1140 tttaactcgc ttggatctat ccaaaaatca gattcgtagc ctttaccttc atccttcatt 1200 tgggaagttg aatteettaa agteeataga ttttteetee aaceaaatat teettqtatq 1260 tgaacatgag ctcgagcccc tacaagggaa aacgctctcc ttttttagcc tcgcagctaa 1320 tagcttgtat agcagagtct cagtggactg gggaaaatgt atgaacccat tcagaaacat 1380

```
ggtgctggag atactagatg tttctggaaa tggctggaca gtggacatca caggaaactt
                                                                   1440
tagcaatgcc atcagcaaaa gccaggcctt ctctttgatt cttqcccacc acatcatqqq
                                                                   1500
1560
cagaagttca gtgagacacc tggatctttc acatgggttt gtcttctccc tgaactcacq
                                                                  1620
agtetttgag acaeteaagg atttgaaggt tetgaacett geetacaaca agataaataa
                                                                   1680
gattgcagat gaagcatttt acggacttga caacctccaa qttctcaatt tqtcatataa
                                                                  1740
ccttctgggg gaactttaca gttcgaattt ctatggacta cctaaggtag cctacattga
                                                                   1800
tttgcaaaag aatcacattg caataattca agaccaaaca ttcaaattcc tggaaaaatt
                                                                   1860
acagacettg gateteegag acaatgetet tacaaceatt cattttatte caageatace
                                                                  1920
cgatatette ttgagtggca ataaactagt gaetttgeca aagateaace ttacagegaa
                                                                  1980
cctcatccac ttatcagaaa acaggctaga aaatctagat attctctact ttctcctacg
                                                                  2040
ggtacctcat ctccagattc tcattttaaa tcaaaatcgc ttctcctcct gtagtggaga
                                                                  2100
tcaaacccct tcagagaatc ccagcttaga acagcttttc cttggagaaa atatgttgca
                                                                  2160
acttgcctgg gaaactgagc tctgttggga tgtttttgag ggactttctc atcttcaagt
                                                                  2220
tctgtatttg aatcataact atcttaattc ccttccacca ggagtattta gccatctgac
                                                                  2280
tgcattaagg ggactaagcc tcaactccaa caggctgaca gttctttctc acaatgattt
                                                                  2340
acctgctaat ttagagatcc tggacatatc caggaaccag ctcctagctc ctaatcctga
                                                                  2400
tgtatttgta tcacttagtg tcttggatat aactcataac aagttcattt gtgaatgtga
                                                                  2460
acttagcact tttatcaatt ggcttaatca caccaatgtc actatagctg ggcctcctgc
                                                                  2520
agacatatat tgtgtgtacc ctgactcgct ctctggggtt tccctcttct ctctttccac
                                                                  2580
ggaaggttgt gatgaagagg aagtettaaa gteectaaag tteteeettt teattgtatg
                                                                  2640
cactgtcact ctgactctgt tcctcatgac catcctcaca gtcacaaagt tccggggctt
                                                                  2700
ctgttttatc tgttataaga cagcccagag actggtgttc aaggaccatc cccagggcac
                                                                  2760
agaacctgat atgtacaaat atgatgccta tttgtgcttc aqcaqcaaaq acttcacatq
                                                                  2820
ggtgcagaat gctttgctca aacacctgga cactcaatac agtgaccaaa acagattcaa
                                                                  2880
cctgtgcttt gaagaaagag actttgtccc aggagaaaac cggccatgcc aatatccagg
                                                                  2940
atgccatctg gaacagtaga aagatcgttt gtcttgtgag cagacacttc cttagagatg
                                                                  3000
gctggtgcct tgaagccttc agttatgccc agggcaggtg cttatctgac cttaacagtg
                                                                  3060
ctctcatcat ggtggtggtt gggtccttgt cccagtacca gttgatgaaa catcaatcca
                                                                  3120
tcagaggett tgtacagaaa cagcagtatt tgaggtggcc tgaggatete caggatgttg
                                                                  3180
gctggtttct tcataaactc tctcaacaga tactaaagaa agaaaaggaa aagaagaaag
                                                                  3240
acaataacat teegttgeaa actgtageaa eeateteeta ateaaaggag caattteeaa
                                                                  3300
cttatctcaa gccacaaata actcttcact ttgtatttgc accaagttat cattttgggg
                                                                  3360
tcctctctgg aggtttttt tttctttttg ctactatgaa aacaacataa atctctcaat
                                                                  3420
tttcgtatca aaaaaaaaa
                                                                  3439
```

```
<210> 6374
<211> 6191
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5553)...(1360)
<223> similar to gi2570024 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 6374
ttttttttt ttaagaaaca atatattta tttttctgac accacagctc tggcgagtgg 60
ttttgtacca aatttaatgg aggttacaca gaacgtctta cgcatgggag ggggaggaaa 120
```

```
gggaaggaac cacaaaattt aaaacaaaca gaaaccaaat tcctggatag cttttagcat
                                                                      180
ctgtcccact cccacattaa taaaattcac ttgggaattc ctaataaaag gaaaacaaaa
                                                                      240
aacaaggtgg ggcagggaag ggtatgatgg gaaaggagaa agacttaggg ggaaaaaaga
                                                                      300
ccagagagca tcccaaggac agacctttcc ctctcagagc caagaggacg ctcggcatgg
                                                                      360
aaggcgaggc tttgctagat ttatttcccc aaaataacac tgtgtattgc agctgccaaa
                                                                      420
gggaaagaga gagggaagca gagggtcacc agcggggggc acaaaggaag gaaacactta
                                                                      480
actgaggaga cagagcaaaa tcggagagag aaacagagaa aatgtgccag tgggttggta
                                                                      540
tattgggaga caagacagtg ctgaagagca cttgaactga aaaacaaatg tcctaagagt
                                                                      600
cattattttt caaaagaaaa atctcccccc tccccccacc cctcgctgaa cttagttcct
                                                                      660
ttttttgtgc ttttcattaa tactctgctc tgaggtcgta gtttggtttt tctatacact
                                                                      720
gcagttgaaa gaaaatagtc caaaggtctg aagatggatt ctccacctaa agtaaacagc
                                                                      780
ccagcattcc tgttctcctc ttgccccaaa gactaaagtc tctgctaaaa tcccttttac
                                                                      840
aatatagtac agtacacaga aaaaaataaa gcccaaatca aaaaaacaaa aacagaaaag
                                                                      900
aatcctggga gaagccagtc caaaggacgt aaacatacag agaacggtgc aacacatgac
                                                                      960
cgatggcaat tctcaaagca cagctacaga ttcccaaaag taggtgccat cattgatacc
                                                                     1020
caagtccaca aaaataattt ttaaaaaata aatcttaaaa aaaacacacc tgttgattaa
                                                                     1080
atgaataatt tgttttcagg taaatccata cattctcgag ttcccccctc ccccaaagca
                                                                     1140
gccctcgggt ctctgttctc ctattgcatg accaatagta agtactcctg gaactccctc
                                                                     1200
aaagcagctc tcaggacctg gaatctcatc ttgacaagga tcggcacatc ccatcttagc
                                                                     1260
agettaaaac atcatgtttc ctgggttgcc aggtccttgg ctaaatccac ccatgcccac
                                                                     1320
gtcagcagcc atgccccggg gcctcatctg tggggggatc atgatgttct gttggggtcc
                                                                     1380
catcatgccc tgcatggaca tcatcatgcc tggagagccc acaggcccag ggtgggtgta
                                                                     1440
gageceggea ggececegat cettgecagg aateatgece acggeageag etggattget
                                                                     1500
catcagggtg ggctggccgg gcattgtaga ttgtgctggt gacatcatcc gatggtgagg
                                                                     1560
teccateatg cettgttgga gaaaggetgg tggteteatg gggttgtgge etggeatgga
                                                                     1620
tggagctgta ccaagaggga tgtccggagt tcccactggc cctggacctc ccatgccagg
                                                                     1680
taatgctagt cccattctgg gggcttgttc gcccatcatc ccctgcatgt gtgaaaaccc
                                                                     1740
aggtccagga ccctggggct gtttacggcc tggaacttcc cctcgaggga aatattgcag
                                                                     1800
cgtctggctg ggcttctcag atggaataat gcgggataga tcaaactcag gtattccggt
                                                                     1860
ggctccaggt cggatgacct cctgcagatc tgggtctgta aacaccgaag gcatgctgtt
                                                                     1920
ccccaggaca gtgaaggagt caggaccccc ggggcctcca ggcttgcaaa gtgctgcatc
                                                                     1980
tgctgaactt tggggcaggt tgctggggcg gccaaggggg ccttctcctg ggaaacccat
                                                                     2040
ccctcctggg aagctgccct gcccccact ggggccattg tgagggaatg gaacctgctg
                                                                     2100
tgggggagac tgtactggag ggaagccctg ggggaagccc atccgtcctt gaggtaccat
                                                                     2160
cggtggctct tgggacccat gccccatgat aggattgtgt gacatcaagc caggcccat
                                                                     2220
tgggacccca tgaggaggta tgttgggtcc cacggcattt ggagagggca tctgattgga
                                                                     2280
gtgagaaagt ggctgggtca ttcccattgg gctgagggtt ggcatcggaa ccacggggtt
                                                                     2340
tggacctgaa attcgaggat tctgtgtatt aatgcccatt cctggcatat tattcattga
                                                                     2400
tggcaagttg ggagaacgag ctggagggga gtcgtcatct gagctggcca cagtcttgat
                                                                     2460
agcatcatgg ttataaccgg ggttggaaac tgggccattg caaacttgga cattccgaga
                                                                     2520
catccataat agagagtggg ttctgggaaa gggttggctc tggaggcatg gtataaggtg
                                                                     2580
tactagaggg aagacttccc agggatattc acagaggcag gctggctggc tgtaggaggt
                                                                     2640
ggggggccac ctgactctac atttcccagc atggctgggg aggccatggt gaggggtgct
                                                                     2700
ttatggtttg gagggatccc aggactctga aggggaggct ctggagaaga ggtccatcca
                                                                     2760
ggtgacgggg caggaagtga tggagacttg aggtggacag gtgaagcagc agcagacccc
                                                                     2820
aaaacagggg gggacttaat ggaagcagca gcagctgggc ccgccagcat gcctgccagc
                                                                     2880
tgcgatggag tctgggggga cttgaggttc cccgagggcg agcccagcat tggtgactgg
                                                                     2940
acttggtgca tcgtgggaga cttcagaggg ttaatgcctg gggaatgcac ctggctgcct
                                                                     3000
gccacagata tatccaaggg cttccgcccc aggccgcgct gaactggagg agctgtgttg
                                                                     3060
aggetggtgg ggttactgga agggttgaga ggtagtggtg gcatatgact gageeggetg
                                                                     3120
ttagtcctct ggtcgggccc aattggttct ctgagattcc gcaagccact gttgctgcct
                                                                     3180
ggaccetgag acatgggaag gaatggtetg gggcccatge catactectg etgggggtge
                                                                    3240
tcaccaaatg gcagtggcac catcttctgc tgagcaggca gcatgtctga gccacctggg
                                                                     3300
cgtaatttca gcatctcctc agggcccgcc ccagcctctc tcatcttctg aggtatcatc
                                                                    3360
tgagagttgg atcccatgtt gacatttaga ttgacatctc ccttcatccc actaggaacc
                                                                    3420
atcccaaact caagttcccg accagggccc atctgtgggg gaattccttt tggaaagtca
                                                                    3480
cccctagaag gactcagagg gccctcaact ggtattcgag ggaaaatggg gttattccca
                                                                    3540
```

```
ggctccatgt ggcgctggga gcctggaatc atcctgttca tctccatgct gggcctgatg
                                                                    3600
cettecatgg ceatecetgg ggggagaece agetgtttet etgecagetg etgetgaaae
                                                                    3660
atctetteag acaateettg ggggtttggg aagegtteee eteggeeagg acegetgaaa
                                                                    3720
atgecetgge caggaggaaa atttegaeca tetgggattt ttggeaeate atetggeeaa
                                                                    3780
ctgactccag aaagacctgg tctagatgca gggttgggga cattcggccc ttccatttca
                                                                    3840
gagtttatca tgcctgcaaa tccagggagg cgcatctggc tccctggcat gttggggtgg
                                                                    3900
ggagccatgc ccctcggggg cagagaatgt ggcatgttga taccatcaga aaatggctct
                                                                    3960
gtacccccag gtgcccagcc ttcactaggg gtcatctggt atggaggggg gggtcctcgg
                                                                    4020
accactecce gaggecegtg etgatggace atcatgteet ggagggaaca etgetggaca
                                                                    4080
accacttgtt ccggcttcct cctcttctct tcataaaact cctgctgcag tttcagccac
                                                                    4140
getatetget egggagteat atggteaagg tggtegggte etatggteec agaetgggag
                                                                    4200
ttcatagaag gtggaaccat ttcatctgga gaaaagggta catctctatg tccttgaggg
                                                                    4260
ccaaatggag ctcccacgtc tgtccggggc ccaggtccct tacctaggct ttgggattgg
                                                                    4320
gccatcatgg cctgtattgg cccttctggt tttttctgag gcccatctaa taccccagga
                                                                    4380
ttctgctgcg gtcccccact ttgtgctcct gtgaattctt tctcatcagg aaaaagcatg
                                                                    4440
egetggatat etetgagagt ttgtaaggag egeteeeggt geteeagetg eteetgagat
                                                                    4500
aggccatcgg gattctctcc cagtgtgggg ggctcgccac tggacactgg tggaggcgga
                                                                    4560
ggggctttgg gatctgctga agagctattg ctcccctggg agacaggggt cactgcccta
                                                                    4620
4680
cttcctacag aaggaatcag tttgttttct accccaggac tctcccggtc caggggacqt
                                                                    4740
gggggtgcgg caggcttggg tgctggtgcc ggaatgggtg gagttggctg cagtctggta
                                                                    4800
ttctgggaag aattctggtc ctggttggcc ggagctgggg gctgttgtgg gagaggtttc
                                                                    4860
ggatcattcc gaagggcaga tatctgtgtg ttcagaggcg ctgtgcttct ctctgtcttg
                                                                    4920
ttgttagaaa tgttctggat gtggaaagag acgatagttt caacctggcc cttcaaaaca
                                                                    4980
gettetgeag etttattgge cateteagta gaaaacaegt acaecaettt ggetggagte
                                                                    5040
ttctgagcag gtgtgggctc tgtggcagta gtttggccat gggggggggt agaagacctg
                                                                    5100
ggggctgtag catttgatgg ggtcatcgag tgtggtgtgt gctgggaatc ctgggacttt
                                                                    5160
atgtggtcag cagaattaca ttctttaatg tcagagtcat cgtttggagt cccaggatct
                                                                   5220
ctctgatcaa aggagtcggc ggaaatactt cgctcccttt tccccttgcc cttggcacca
                                                                   5280
tttccagccc cattcttcag ccccatgctc ccacctgggc cagggagtgc tttaggggta
                                                                   5340
tggcccccac tcttggagtc acagggggat ggctgggatt ggctggctga gccccctgt
                                                                   5400
ttaccctgat tggagaattt ggaatccagc tgggggtttc cagatgggga catcactgta
                                                                   5460
gggggacgga ccatcacctc ctgctttgac ttagggctac tctgtgtgtt tcctgatgga
                                                                   5520
gageteetea etttagggtt actggaatge attgattgaa ateetgaget tgeagteaca
                                                                   5580
aacgggacag gctcaccgag ttcctctcgg gttgcagcag aaacagctgc tgggggcagt
                                                                   5640
ggcactggcc cactgcttgc tgggtgcgtc ccttagcgct cgctgcctgt atgccttttt
                                                                   5700
cctctttgtt tttctctgct gtggaagtgg gtcctttccc cttgcagctc cagcattctc
                                                                   5760
tgggtgcgtg cctcctgctg ccagaggaaa atctcgcatc tccagggcat acaaaacccc
                                                                   5820
aagggtcacg acactgcagt gctcatcctg gaggtgagga gtccaggaac ccccttctca
                                                                   5880
aagatgaccc ttgtctttca atatgtccaa tttgctattt cttctacatc gggacacgga
                                                                   5940
agaactttcc aaaaatgatc tctgccaccc aatcagatgg gaatgtttag gtcaaagcag
                                                                   6000
aatgacgcca actgggccca cattcagtcc ttttttatga ggagaaattc tggagaatca
                                                                   6060
tttcagaaac tgaggggga aagtgaatga agacaaaaaa gacccttttc ccgcaatccc
                                                                   6120
tggcctcctg gtatcaagac accaggacaa catcaaagca acttaggggg aacactttag
                                                                   6180
gggccacgaa a
                                                                   6191
```

```
<210> 6375
<211> 1749
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc_feature

<222> (99)...(1206) <223> similar to gi3873707 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 6375
ttttaacctc gatgaccatt gtgcagtctg gtggaattcc gcagcccttc gctcgcccgg
                                                                       60
cctccccctc cctggttccg cgttctggtt ccgccatgga atccaacaag gatgaagctg
                                                                      120
agegetgtat cageategee etcaaggeea tecagageaa ecageeegae egggegetee
                                                                      180
getteetgga gaaggeacag eggetgtate egaegeegeg agttegegee etgattgagt
                                                                      240
ccctcaacca gaaaccacag actgccggtg accaaccccc acccacagac acaacccatg
                                                                      300
ccacccacag gaaagcaggt gggaccgatg ccccctcggc caacggtgaa gctggaggag
                                                                      360
agagcaccaa aggctacact gcagaacagg ttgcagctgt gaaaagggtc aagcaatgta
                                                                      420
aagattacta tgagatcctg ggggtgagca gaggggcctc ggatgaggac ctgaagaagg
                                                                      480
cctaccgcag actggccctc aaattccacc cagacaagaa ccacgcacct ggtgccactg
                                                                      540
aagcettcaa agceattgge acageatatg eggtaeteag caaceeggag aagaggaage
                                                                      600
agtatgacca gttcggcgat gacaagagcc aggcggcccg gcacggccat gggcatgggg
                                                                      660
atttccaccg tggctttgag gccgacatct cccctgaaga cctcttcaac atgttctttg
                                                                      720
gcggcggctt cccttctagt aacgtccacg tctacagcaa cggccgcatg cgctatacct
                                                                      780
accagcaaag gcaggaccgc agggacaacc agggtgatgg cgggctaggg gtgtttgtgc
                                                                      840
agetgatgee tateeteate etgatteteg tgteagetet cagecagete atggteteca
                                                                      900
gtccacccta cagtctgagt ccaagaccgt ccgtgggcca catccacagg cgagtcactg
                                                                      960
accacctggg tgtcgtctac tatgtgggag acactttctc cgaagagtac acaggctcca
                                                                     1020
gcctcaaaac agtcgagcgg aatgtggaag atgattatat cgccaacctc cggaacaact
                                                                     1080
gctggaagga gaagcagcag aaggaaggct tgctgtaccg ggcacgctac tttggcgaca
                                                                     1140
cagatatgta ccacagagca cagaagatgg gcacccccag ctgcagccga ctgtcagagg
                                                                     1200
tgcaggcctc cctgcatgga tagtcctggg ccagccacac caccgaggtc caaactatga
                                                                     1260
aatccctgga gaatttttgg tgacatgcac tggagccaag gtgatggact gtatatttga
                                                                     1320
ggaaagacaa acaaagaaac aaaattaaaa tggaattgga ggccgaacgc tgcacagctg
                                                                     1380
ccctctctct cacccagtaa atgcagaaag ctcttaggac agacagaaaa cctgccatgg
                                                                     1440
ggctgcttcc ctccctcgca gggctggcgg aggctccgca tcgcctctct cctaggatac
                                                                     1500
agaaaccatg gcaacgaaag tagaatgtaa aactcgcagc agatatcagt gggaagggct
                                                                     1560
gggggagggg gcacccagct gcctttcctc cctcacagga gccaccacca gccacctctc
                                                                     1620
aggagaagcc agaggccctg gccaaagata ggaggaagaa agagaactct ccatagaatg
                                                                     1680
taatttatag atgcgtgtat atgtatatat atctatttat atgtaaatag gcatatatga
                                                                     1740
agataaaaa
                                                                     1749
```

```
<210> 6376
<211> 3884
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (548)...(3887)
<223> similar to gi3882149 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

cacggaaaaa gatgaaaaaa cagctcacaa cttggagaac gtactgatac atttctggga 60 aagactgtca gagatctgtg ttgcgaaaat cagtgagcca gaagctgatg ttgagtccgt 120 tttgggtgta tctaacctat tacaggtgct tcagaagccg aagggctcat tgaagtcaag 180 taaaaaaaaa aatggtaagg ttagatttgc tgatgagata cttgaaagca ataaagagaa 240 tgaaaaatgt gtatcttcag aaggagagaa gattgaatgc tgggaattaa caactgaacc 300 ttctctcact cataattctt caggcctttt gtctcctcta aggaaaaaac ctttggaaga 360 cttagtctgt aaactcgcag atataagtat taattatgtc aatgaacgaa agtcagagca 420 acatctaagg tttctttcta ctctgcttga ctccttttct tcaagccgag tatttaaaat 480 gctacttggt gatgaaaaac agagtattgt ccaagccaaa cctcttgaaa tagccaagct 540 tgtacaaaaa aatcctgcgg tgcagttttt ataccagaaa ctgataggtt ggctaaatga 600 agatcaaagg aaggattttg gtttcctggt ggacattttg tacagtgctc tccggtgctg 660 tgacaatgat atggaaagaa aaaaagtctt ggatgatcta accaaggtgg acttgaaatg 720 gaattetett ettaagatta tigaaaagge atgteetagt teagataaac atgetttagt 780 aactccttgg ctcaaaggcg atatccttgg tgagaaattg gtcaacttgg cagattgtct 840 ttgtaatgag gacttggaat ccagggtatc ttcagaatct cacttctcag aaagatggac 900 tcttctaagc ttggtattat cccaacatgt taaaaatgat tacttgattg gagacgtata 960 tgttgaaaga atcattgtta gacttcatga aactttattc aaaacaaaga aattatcaga 1020 agctgaaagc agtgactcat cagtgtcttt tatctgtgat gtggcctata actatttcag 1080 ctcagcgaaa ggatgcttgc taatgccatc atctgaagat ttattattaa ctctctttca 1140 gttatgtgct cagagcaaag aaaaaacaca tttgccagat tttcttatct gtaaactgaa 1200 aaatacttgg ctctctggtg taaatttatt ggttcatcaa actgacagtt catataaaga 1260 gagtacette etacattigt etgetetgig getgaagaac caagiteagg etteatetti 1320 ggatatcaac agtotocaag tootottgto tgotgttgat gatttgctaa atacacttot 1380 agagagtgaa gattcttatc ttatgggagt ttatattgga agtgtaatgc cgaacgacag 1440 tgaatgggaa aagatgaggc agtctcttcc tatgcagtgg ttacatagac ctcttttaga 1500 gggaagattg agtttgaatt atgaatgttt caaaacagat tttaaggaac aggacataaa 1560 gacactteec agecatttgt gtactteage attattgage aaaatggtet taattgeact 1620 gagaaaggaa acagtcttag aaaataatga gcttgagaaa ataattgcag aactgcttta 1680 ttcactgcag tggtgtgaag aattagataa cccacctatt tttctaattg gattttgtga 1740 aatacttcaa aaaatgaata ttacgtatga taacttacgt gtacttggta atatgtcggg 1800 ccttttgcag ctgttattta acaggtccag agaacatggc acactgtggt ctcttattat 1860 tgctaagttg atcctttccc gaagcatttc atctgatgaa gtaaaaccac attataagag 1920 aaaagaaagt ttttttccac taactgaagg caatttgcat accattcaaa gtctatgtcc 1980 atttttgtca aaagaagaaa agaaagaatt tagtgctcaa tgtatacctg ctcttttggg 2040 ctggactaag aaagatcttt gcagcactaa tggaggtttt ggacatcttg ccattttcaa 2100 ttcttgtctg caaaccaaaa gtatagatga tggagagcta ttacatggaa tattaaaaat 2160 cataatatcc tggaagaaag agcatgaaga tatttttctt ttcagttgta atctatcaga 2220 agcaagtcca gaggtactgg gtgtaaatat agaaataatc cggtttcttt ccctgtttct 2280 gaaatactgc tcatcccctt tggcagagag tgagtgggac ttcatcatgt gctccatgtt 2340 ggcttggttg gagacaacaa gtgagaatca ggcattgtat tctattccac ttgtgcaact 2400 gtttgcctgt gtcagctgtg atttggcctg tgacctcagt gctttctttg attccacaac 2460 tctggatacc attggcaatc ttcctgtaaa tctaatcagt gaatggaaag aattttttc 2520 ccaaggcatc cacagtttgc ttttacctat tttggtgact gttacaggag aaaacaaaga 2580 tgtgtctgaa acatcctttc agaatgcaat gctgaaaccc atgtgtgaaa cattaacgta 2640 tatctcaaag gaacagctat tgagtcacaa acttcctgca agattagttg ctgaccaaaa 2700 aacaaactta ccagaatatc tccagacttt gttaaataca ttggccccat tactcctctt 2760 cagagetagg cetgtgcaaa ttgetgttta teatatgeta tacaaattga tgeetgaatt 2820 accacagtat gatcaggata atctaaagtc atacggagat gaagaagaag agccagcctt 2880 gtcaccacca gcagcactga tgtctcttct tagcattcaa gaggacttac tagaaaatgt 2940 tttggggtgt attcctgttg gacagatagt tactattaaa ccactgagtg aagacttctg 3000 ttatgttctg ggataccttc tcacttggaa attaatacta actttcttca aagctgcatc 3060 atcacagett egggetttgt attecatgta tetteggaaa acaaagagtt tgaataaatt 3120 gctctatcac ctgttcaggc ttatgccaga aaatccaacc tatgcagaga cagcagttga 3180 ggtcccaaat aaggacccta aaacattctt tactgaggag ctccagctga gtattagaga 3240 aacaacaatg cttccatacc acattccaca cttggcttgt tcagtctatc atatgacatt 3300 aaaagacttg cctgccatgg ttaggttgtg gtggaatagc agtgagaagc gtgttttcaa 3360

```
tattgtggat agatttacaa gcaagtatgt cagcagtgtt ctttctttc aagaaatatc
                                                                    3420
ttctgtacaa acaagtacac aactatttaa tggcatgacg gttaaagctc gagctactac
                                                                    3480
tcgagaggta atggctactt atactattga ggacatagtt attgaactta taatacaact
                                                                    3540
gccttcaaat tatccactgg gttcaataat agtagaaagt gggaaaagag taggagtagc
                                                                    3600
tgttcagcag tggcggaact ggatgctgca gttaagcact tacctcaccc atcagaatgg
                                                                    3660
aagtattatg gaaggettag etttatggaa aaataaegta gacaaaegtt ttgagggtgt
                                                                    3720
tgaagattgc atgatctgtt tctcagtcat tcacggtttc aactattccc ttcccaaaaa
                                                                    3780
agcctgtaga acatgcaaga aaaaattcca ttcagccctg cttgtacaaa tggtttacat
                                                                    3840
ctagcaacaa atccacttgt tcactgtgtc gtgagacgtt tttc
                                                                    3884
```

```
<210> 6377
<211> 2490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(1481)

<223> similar to gi3647275 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 6377

ggcccacgga gcccaccatg ccgcgcccgg cccccgcgcg ccgcctcccg ggactcctcc 60 tgctgctctg gccgctgctg ctgctgccct ccgccgcccc cgaccccgtg gcccgcccgg 120 gcttccggag gctggagacc cgaggtcccg ggggcagccc tggacgccgc ccctctcctg 180 cggctcccga cggcgccc gcttccggga ccagcgagcc tggccgcgcc cgcggtgcag 240 gtgtttgcaa gagcagaccc ttggacctgg tgtttatcat tgatagttct cgtagcgtac 300 ggcccctgga attcaccaaa gtgaaaactt ttgtctcccg gataatcgac actctggaca 360 ttgggccagc cgacacgcgg gtggcagtgg tgaactatgc tagcactgtg aagatcgagt 420 tccaactcca ggcctacaca gataagcagt ccctgaagca ggctgtgggt cgaatcacac 480 ccttgtcaac aggcaccatg tcaggcctag ccatccagac agcaatggac gaagccttca 540 cagtggaggc aggggctcga gagccctctt ctaacatccc taaggtggcc atcattgtta 600 cagatgggag gccccaggac caggtgaatg aagtggcggc tcgggcccaa gcatctggta 660 ttgageteta tgetgtggge gtggaeeggg cagacatgge gteeeteaag atgatggeea 720 gtgagcccct agaggagcat gttttctacg tggagaccta tggggtcatt gagaaacttt 780 cctcttagat tccaggaaac cttctgtgcg ctggacccct gtgtgcttgg aacacaccga 840 gtgccagcac gtctgcatca gtgatgggga aggcaagcac cactgtgagt gtagccaagg 900 atacacettg aatgeegaca agaaaaegtg tteagetett gataggtgtg etettaacae 960 ccacggatgt gagcacatct gtgtgaatga cagaagtggc tcttatcatt gtgagtgcta 1020 tgaaggttat accttgaatg aagacaggaa aacttgttca gctcaagata aatgtgcttt 1080 gggtacccat gggtgtcagc acatttgtgt gaatgacaga acagggtccc atcattgtga 1140 atgctatgag ggctacactc tgaatgcaga taaaaaaaca tgttcagtcc gtgacaagtg 1200 tgccctaggc tctcatggtt gccagcacat ttgtgtgagt gatggggccg catcctacca 1260 ctgtgattgc tatcctggct acaccttaaa tgaggacaag aaaacatgtt cagccactga 1320 ggaagcacga agacttgttt ccactgaaga tgcttgtgga tgtgaagcta cactggcatt 1380 ccaggacaag gtcagctcgt atcttcaaag actgaacact aaacttgatg acattttgga 1440 gaagttgaaa ataaatgaat atggacaaat acatcgttaa attgctccaa tttctcacct 1500 gaaaatgtgg acagcttggt gtacttaata ctcatgcatt cttttgcaca cctgttattg 1560 ccaatgttcc tgctaataat ttgccattat ctgtattaat gcttgaatat tactggataa 1620 attgtatgaa gatcttctgc agaatcagca tgattcttcc aaggaaatac atatgcagat 1680